

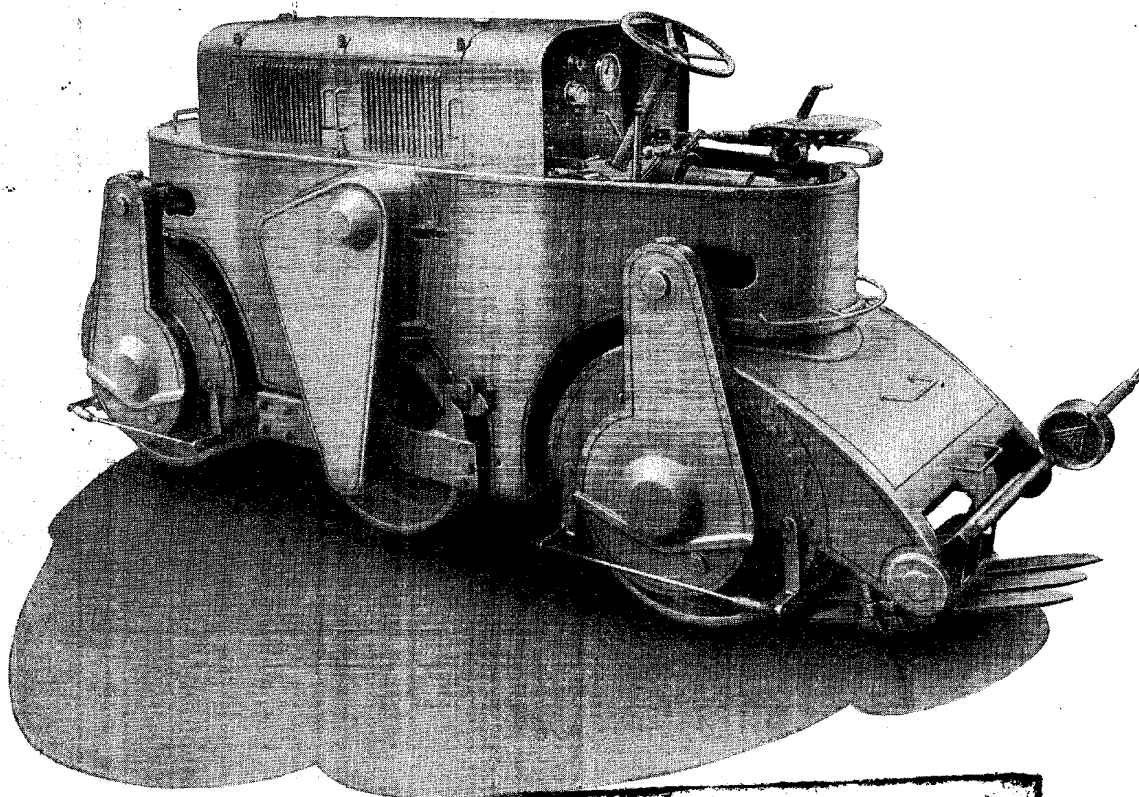
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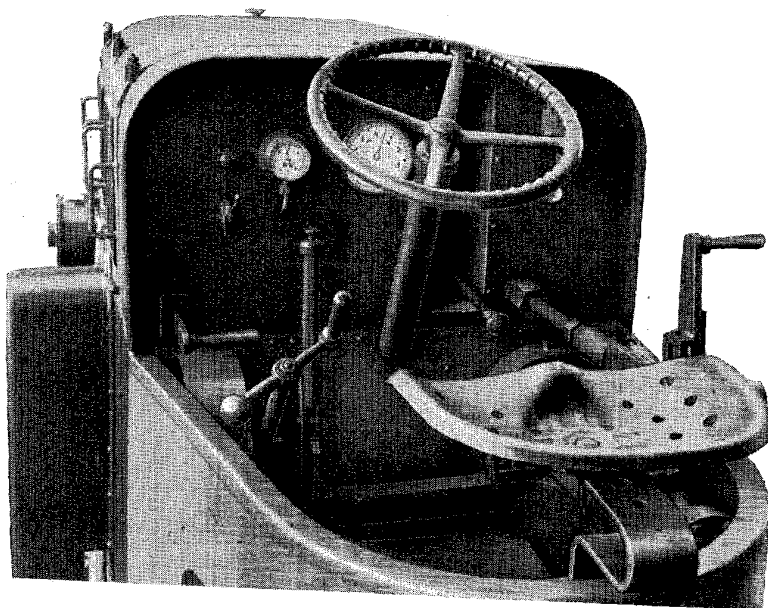
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# VIBRATION ROLLER

FILED FOR PATENT



REFERENCE CENTER LIBRARY



# FIRMER, DEEPER AND QUI

All the types of rollers hitherto known work by the simple principle that the roller cylinders are to bring about a sufficient compression of the road material exclusively through their own weight. It is a matter of fact that essential defects oppose this method, because such materials as for instance stones and gravel with their rough surface are difficult to displace in relation to one another by a general weighted pressure. It may be done at the surface, but deeper down the absolute compression fails, even at very heavy pressure of roller. Too heavy a pressure of roller may, moreover, have the disadvantageous effect that the stones are crushed, which, of course, is not the intention.

By the make of concrete — not the least in case of concrete roads — this fact has long been considered, and during a number of years vibration has been applied, which renders a much better compressed concrete possible than the stamping method does. The principle of vibration has now been adopted in our latest new roller construction — vibration roller, type *P. M. 7 A.* The outstanding feature of the mode of operation of this roller is that the centre cylinder of a three-cylindred, three-shafted roller is furnished with vibrator with a vibration figure of 3600 per minute.

This vibration involves the following advantages:

- The roller pressure goes deep into the roadway.
- The covering material is properly distributed.
- The material is completely vibrated together.
- All gaps will be filled out with the sand. The roadway will obtain a firmer compression.
- The rolling is effected at a speed hitherto unheard of

**Construction.** Both the front and back roller are driven. The centre vibrator roller can be raised and lowered and be left free, if desired, so that it just follows the roadway. On the instrument board of the starting platform a variometer of a dial shows in centimetres and millimetres the surface deviations from the plane roadway.

**If the vibrator roller is fixed,** it will convey to the high parts a vigorous vibration, or the materials, which have not been fixed by rolling, will be pushed in place, so that high points in the roadway will be avoided, while, at the same time, the roadway will get a more even surface than by the use of other existing rollers. When the vibrator roller is raised we get a double-rolled tandem roller with both rollers driven.

**The principle** of vibration might involve that the vibrations were transferred to the whole of the roller with destroying effect. This will never happen with a *P. M. 7 A.*, our patented construction being of such a kind that only the path of the vibration roller will vibrate, as this is separated from the other parts of the roller by special, inbuilt rubber suspensions, which do not allow the vibrations to be conveyed to the roller.

**The roller can be provided with cut-up steel** in the usual way.

**The front and back rollers** are made of extra wear-resisting cast steel. They run in heavy roller bearings,

which involve the smallest possible friction and are cheap in operation and oiling. The roller bearings are built into steel plate cylinder casings, which cover the rollers at top and are at the upper end provided with a pin which projects into the frame of the roller. Round this pin are placed heavy wearing rings through which the pressure from roller to cylinder is transferred. This principle renders the smallest possible stress of the pin and a quite especially stable construction.

**The cylinders are driven** by powerful roller chains running in dust-proof oilbath chain cases. Spring-loaded scrapers keep the cylinders clean.

As mentioned above, **the vibrator roller** is supported by our patented rubber suspension. The fixing and disengaging of the cylinder is effected from the strating platform, from which the cylinder can be raised and lowered in the fixed bearings of the roller frame.

The vibrator shaft is drawn by means of V-belt drive, which can be let in by friction clutch from the starting platform.

**The motive power** is an explosion engine, e. g. a. BURWAIN diesel engine, which has a capacity of 28 HP at ~~1250~~ revolutions per minute. The engine is furnished with right-angle gear with coupling and V-belt drive for vibrator and V-belt drive for coupling for the travelling driving-shaft, which goes to the chain driving-shaft of the front and back rollers.

**The main frame** of steel plate welded in one piece is constructed so rigid that the front and back rollers always roll in the same plan.

**The steering** is effected by steering machine drawn by the engine. The steering wheel throws in friction coupling in each steering direction and is turned in the angular motion corresponding to the turning of the front and back rollers. The driver of the roller has the same feeling with the turning as the driver of a motor-car, but it is the engine that turns the rollers.

**The driving gears** can be adjusted to two different driving speeds under vibration, to a greater speed for rolling without vibration and to driving speed for transport. The rolling gear is working at direct coupling, whereas the transport gear, which is used less, is overgeared.

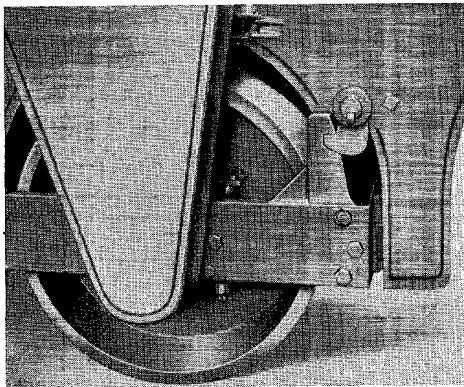
**The reversing gear** is a planet gear, which is working in grease and is in constant engagement. A friction coupling with dry friction provides a safe change-over, which is brought about by a single handle. The roller can be reversed direct from »forward« to »back«.

**The right-angle gear**, which is coupled direct to the engine, is provided with screw-cut toothed wheels. The vibrator is coupled up through a spring-loaded dry conical coupling.

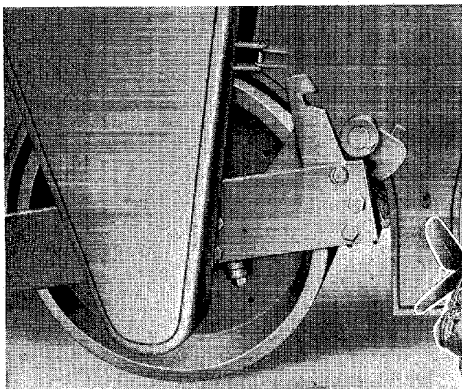
**All the gear boxes** are dust-proof and filled with oil or grease. They are provided with heavy ball bearings and tightening rings.

1. The vibrator roller locked in bottom position.
2. The vibrator roller raised — not locked.
3. The engine with V-belt pulley for vibrator body and transmission of power.

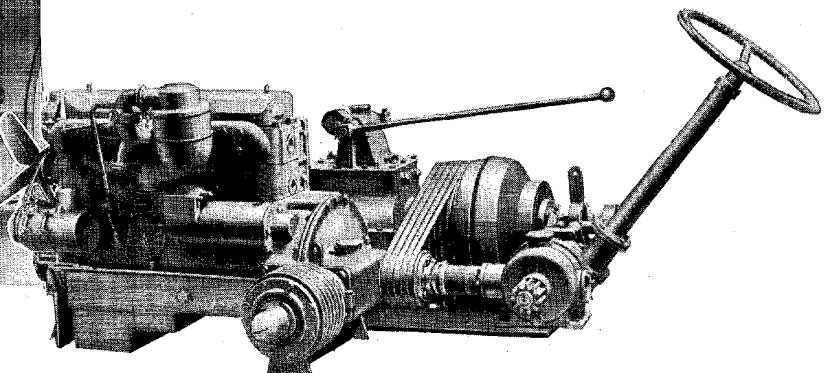
# CKER ROLLING



1.

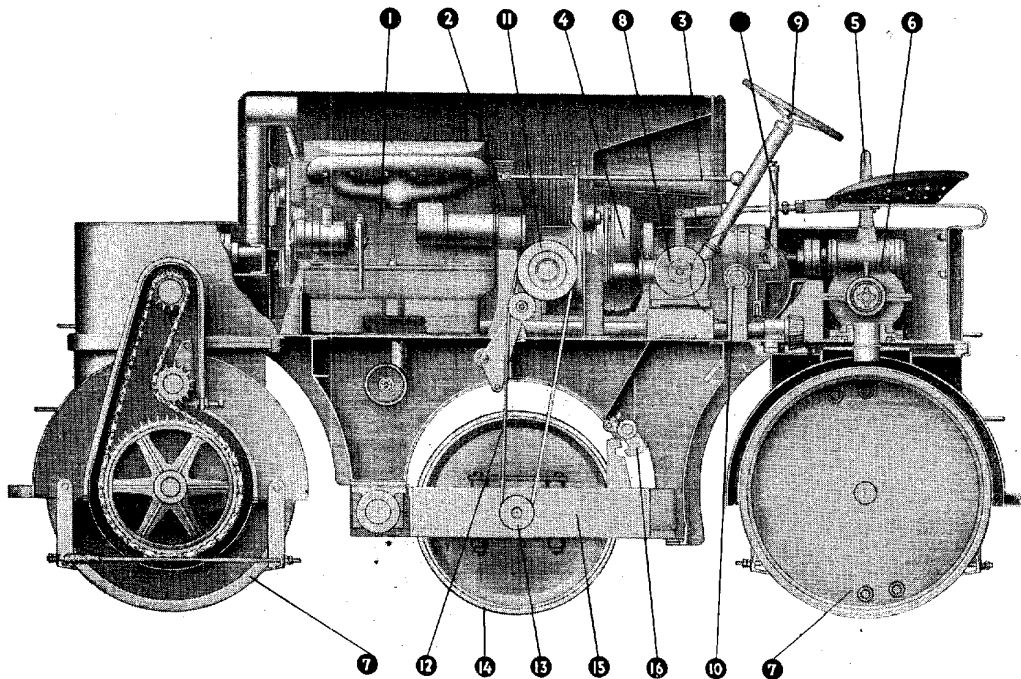


2.



3.





- 1. Engine
- 2. Gear box
- 3. Gear-change lever
- 4. Reversing coupling
- 5. Handle for reversing coupling
- 6. Worm drive for driving rollers

- 7. Driving roller, front and back
- 8. Steering machine
- 9. Steering wheel
- 10. Steering worm
- 11. Right-angle gear with coupling
- 12. V-belt for vibrator
- 13. V-belt pulley for vibr.

- 14. Vibrator roller
- 15. Vibrator roller frame
- 16. Locking hook for vibrator roller frame

#### TECHNICAL DATA FOR VIBRATION ROLLER TYPE P.M. 7 A

##### Weights and measures

Weight of the roller without ballast.....	7000 kilos
Weight of the roller with water	8000 kilos
Diameter of front and back cylinder .....	100 cm
Diameter of vibrator roller ..	82 cm
Width of all cylinders.....	100 cm
Centre distance between rollers	137 cm
Total length of the roller....	406 cm
Total width of the roller.....	140 cm

##### Travelling speeds forward and back:

Transport.....	6,40 km per hour
Rolling.....	3,08 km per hour
Vibration II.....	1,53 km per hour
Vibration I.....	0,78 km per hour
Number of revolutions of the vibrator .....	3600 revolutions per minute

##### Distribution of pressure for rollers:

With raised vibrator roller without ballast: front and back roller .....	35 kilos per cm
With raised vibrator roller with ballast: front and back roller.....	40 kilos per cm
With lowered loosened vibrator roller without ballast: front and back roller .....	29 kilos per cm
With lowered loosened vibrator roller with ballast: front and back roller .	35 kilos per cm
Vibrator roller alone, free-suspended ..	12 kilos per cm
All rollers, fixed vibrator roller without ballast..	23 kilos per cm
All rollers, fixed vibrator roller with ballast ....	27 kilos per cm
Engine capacity .....	28 HP

# PEDERSHAAB MACHINE WORKS LTD.

HEAD OFFICE & WORKS:  
BRØNDERSLEV - DENMARK

CABLEGRAMS:  
CEMENTINDUSTRI

BRANCH OFFICE:  
COPENHAGEN - DENMARK

Approved For Release 2003/12/01 : CIA-RDP80-00926A000300020001-7

Hovedkontor og Fabrikker

**BRØNDERSLEV**

Telefon 450 (4 Linier)

Telegram-Adresse:

CEMENTINDUSTRI

Prospekt Nr. 1332

Afdelingskontor og Værksted

**KØBENHAVN NV**

Vesterbrogade 5

Fuglebakkevej 100

5

Telefon ★ Central 14066

**PEDERSHAAB MASKINFABRIK**

AKTIESELSKAB

# P.M. Fortovs-Tandemtromle

Type T. 3-4 Tons

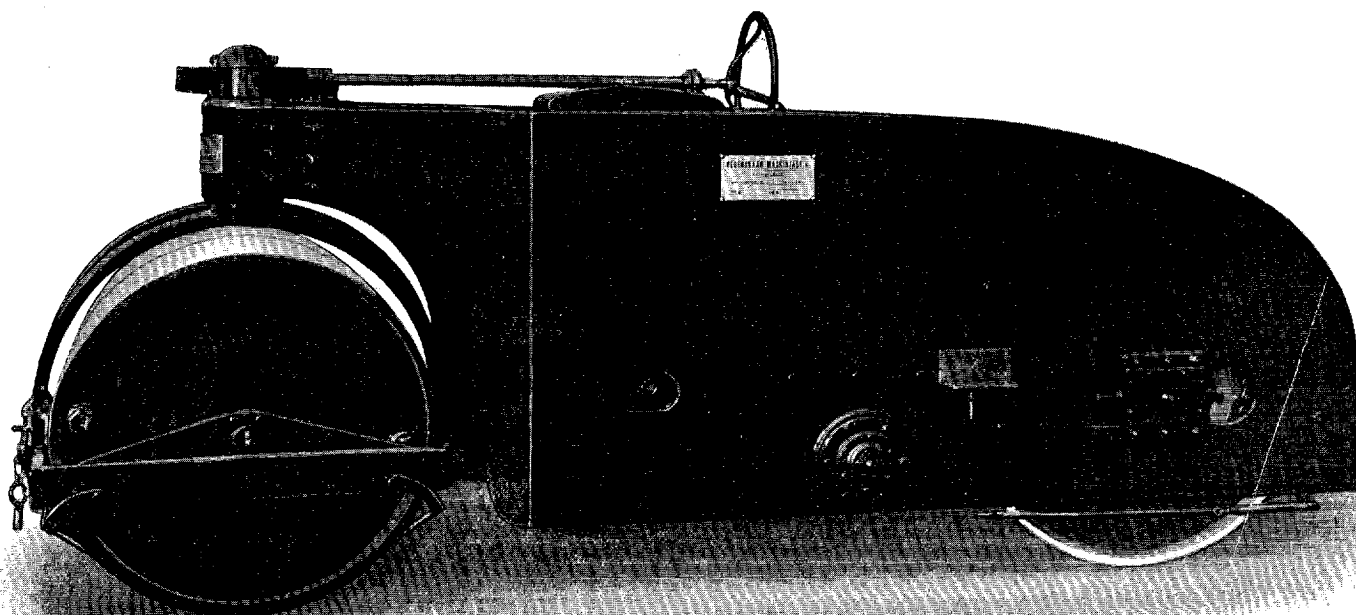
Tromlen er af mest moderne Konstruktion, og følgende Egenskaber kan fremhæves:  
Kileremtræk mellem Motor og Vendegearkasse med rigeligt dimensionerede Friktionshjul.  
Bagvalsen ophængt i Kulissestyr for Stramning af Trækkæder.

De »mekaniske« Dele som Vendegearkasse, Gearkasse, Vinkelgearkasse, Bremsesystem  
er let udtageligt for Eftersyn og Reparation.

Begge Valser er forsynede med Skrabere.

Betjeningen er i særlig Grad let, Tromleføreren kan fra sit fjedrede Sæde naa alle  
Manøvre- og Styreanordningerne.

Se Specifikationen paa Prospektets Bagside

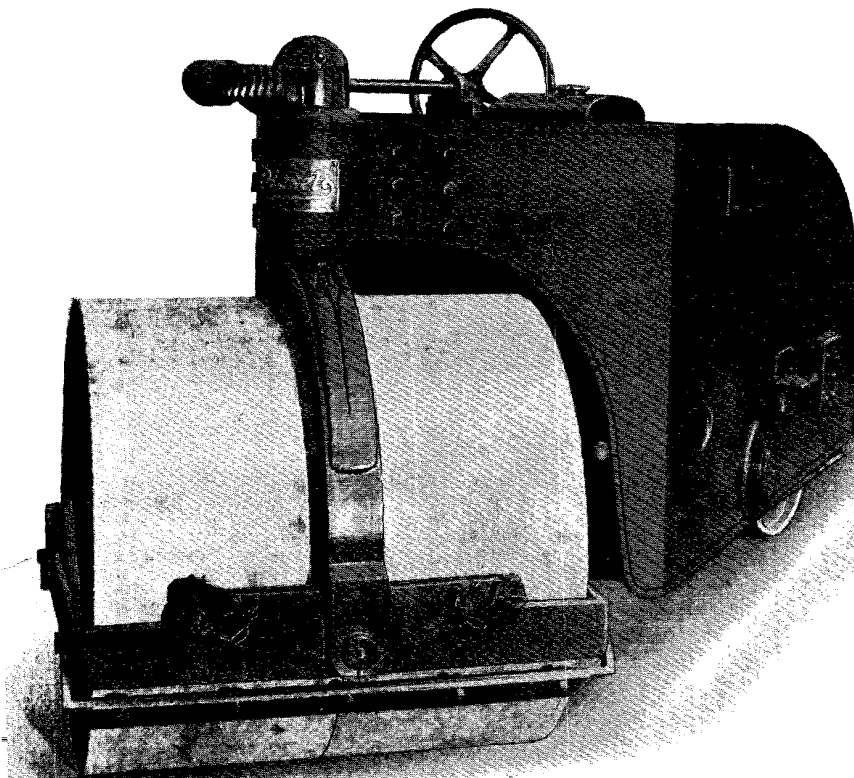


# Tromlens

## Specifikation

Totalvægt uden Vandballast .....	3 Tons
— med — .....	4 »
Diameter af Bagvalse .....	1000 mm
Bredde - — .....	900 »
Bagvalsens Tryk pr. løbende cm	
uden Ballast .....	16,7 kg
med — .....	22,2 »
Diameter af Forvalse .....	900 mm
Bredde - — .....	900 »
Forvalsens Tryk pr. løbende cm	
uden Ballast .....	16,7 kg
med — .....	22,2 »
Centerafstand mellem For- og Bagvalse	2310 mm
Tromlens Totallængde .....	3500 »
Tromlingsbredde .....	900 »
Tromlens Kørehastighed	
frem = 1,3—2,6—5,2 km/Time	
tilbage = 1,3—2,6—5,2 » »	

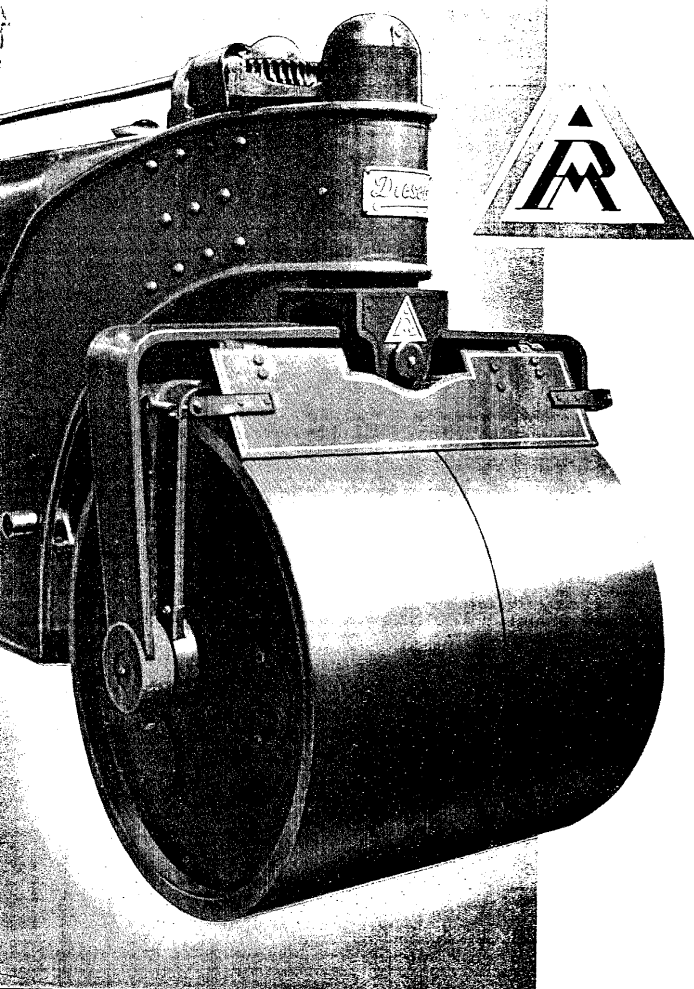
**Tromlen leveres normalt med 8 HK Dieselmotor**



Bemærk Forvalsens  
store Drejeevne og specielle  
Ophængning  
med Anordning for Faststilling  
af Forvalserne til Tromling  
i samme Plan  
som Bagvalserne

Tekniske Data for 7-8,5 Tons P.M. Tandem Tromle:

Tromlens Vægt uden Ballast.....	7000 kg.
"          "  med          "      .....	8500 "
Diameter af Bagvalse.....	1200 mm
Bredde      "          "      .....	1200 mm
Bagvalsens Tryk pr. løbende	
cm. uden Ballast.....	33,5 kg
Bagvalsens Tryk pr. løbende	
cm. med Ballast.....	39,8 kg
Diameter af Forvalse.....	1100 mm
Bredde      "          "      .....	1100 mm
Forvalsens Tryk pr. løbende	
cm. uden Ballast.....	27 kg
Forvalsens Tryk pr. løbende	
cm. med Ballast.....	34 kg
Centerafstand mellem For- og Bagvalse.....	2925 mm
Tromlens Totallængde.....	4730 mm
Tromlingsbredde.....	1200 mm
Tromlens Kørehastighed:	
frem 1,37 - 2,85 - 5,2 km/Time.	
bak 1,37 - 2,85 - 5,2 km/Time.	



# **PEDERSHAAB**

## **MACHINE WORKS**

LIMITED

**BRØNDERSLEV • DENMARK**

CABLE: CEMENTINDUSTRI

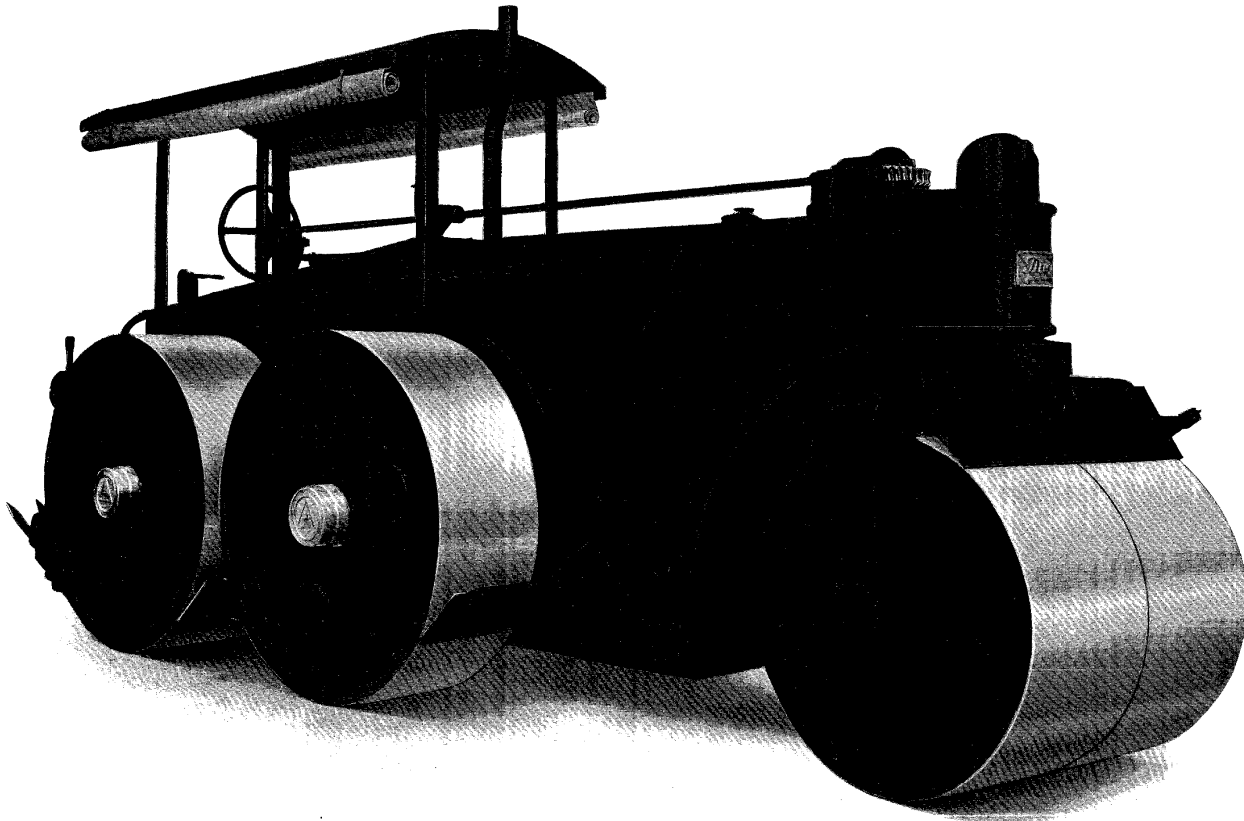
**QUALITY MACHINERY**

FOR MORE THAN

**HALF A CENTURY**

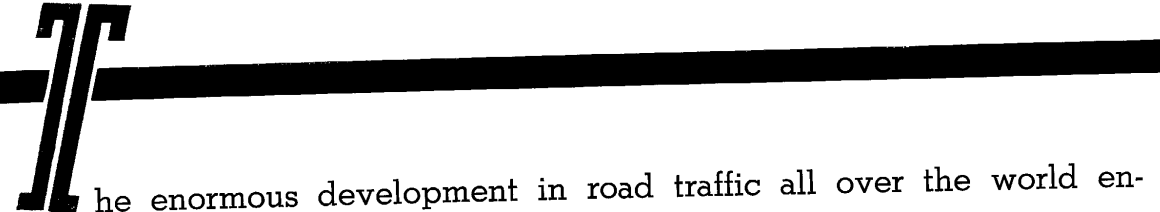
# **ROAD ROLLERS**

Type B2/D Diesel	Type B2/FS Fordson	Specification	8—10 Tons	10—12 Tons
<b>PEDERSHAAB Road Rollers Type B2</b> are built according to the 3-Roller system with one small front and two larger rear rollers. All the rollers are fitted with 2 spring loaded steel scrapers.		Diesel Engine, Horsepower at 1200 r.p.m. ....	21	21
		Fordson " " " " " " 1100 " ....	24	24
		Diesel " " , Number of Cylinders.....	2	2
		Fordson " " " " " " " " ....	4	4
<b>The Power Drive for Type B2 D</b> , a 21 HP LISTER Diesel Engine, the very finest British make embodying patented combustion chamber enabling the starting-up by hand both summer and winter as easily as any petrol engine, thereby eliminating the complicated starting by compressed air. The engine is of the 4-stroke type, completely enclosed, water cooled by means of a radiator. The fuel is SOLAR oil and the fuel consumption approximates 200 grammes per Horsepower per hour at full load. The engine drives through a friction type clutch in either direction.		Weight of Roller without Ballast.....	8000 kg.	10000 kg.
		" " " " " " with " .....	10000 "	12000 "
		Diameter of Rear Rollers .....	1300 mm	1550 mm
		Width " " " " .....	2×440 "	2×500 "
<b>The Power Drive for Type B2/FS</b> , a FORDSON Tractor Engine with its well-known simplicity of control and high degree of economy. The engine is mounted so as to be accessible from all points. The clutch and the gearbox are of the FORDSON type giving the roller 3 speeds forward and one back. The fuel is Kerosene and the consumption is about 300 grammes per Horsepower per hour at full load.		Pressure of Rear Rollers per cm Run without Ballast.....	70 kg.	72 kg.
		Pressure of Rear Rollers per cm Run with Ballast.....	85 "	85 "
		Diameter of the Front Roller .....	1000 mm	1100 mm
		Width " " " " " " " " .....	2×500 "	2×500 "
<b>The Front Roller</b> is cast from a special alloy S.M. steel and is mounted in two sections in a very heavy steel fork, the solid construction ensuring smooth and even steering.		Pressure of the Front Roller per cm Run without Ballast.....	19 kg.	28 kg.
		Pressure of the Front Roller per cm Run with Ballast .....	25 "	35 "
<b>The Rear Rollers</b> are cast from a special alloy S.M. steel and mounted on a heavy fixed axle. Each rear roller has its own independent differential drive which ensures constant power drive on each roller on an uneven surface.		Rear Rollers overlap Front Roller each side.....	130 mm	125 mm
		Centre distance between Front and Rear Rollers..	3150 "	3350 "
<b>The Scarifiers</b> on each side possess 3 teeth and are operated and controlled with ease from the driving platform.		Width of Track .....	1620 "	1745 "
		Total length of Road Roller .....	4650 "	5150 "
<b>The Steering</b> is effected through a worm gear of steel and bronze as well as cylindrical spur wheels, this ensuring easy operation of the machine.		Forward travel speed per hour (for Diesel and Fordson) .....	1-2.5 km	1-2.5 km
		Reverse travel speed per hour (for Diesel) .....	1-2.5 "	1-2.5 "
<b>The Lubrication System</b> is of the most efficient type and ensures adequate lubrication of axles and all moving parts with no more than ordinary care and attention.		" " " " " " ( " Fordson).....	2 "	2 "
All bearings and gears are protected by covers, which exclude dirt and impurities.				
<b>Roof over the Driving Platform</b> , and screens on each side of the roof for protection in bad weather are furnished with all rollers.				
<b>Guarantee.</b> We guarantee our road rollers for 12 months in respect of material and constructional defects.				



## PEDERSHAAB 3-AXLE (5-Wheel) ROAD ROLLER

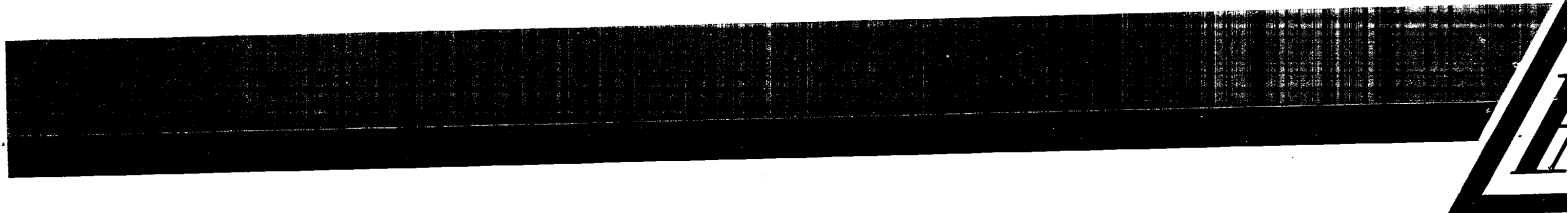
Type B5/D Diesel	Type B5/D Fordson	Specification	13—14 Tons	15—16 Tons
<p><b>PEDERSHAAB Road Rollers, type B5</b> are built with 3 axles on the 5-wheel system. All the 4 rear rollers are driven. The 3-axle system offers the advantage that any ruts or projections on the road are smoothed out, as the centre roller presses upon the road with nearly the entire weight of the machine. — All the rollers are fitted with spring loaded steel scrapers.</p> <p><b>Power Drive for type B5/D Diesel</b> as specified for type B2/D.</p> <p><b>Power Drive for type B5/F5 Fordson</b> as specified for type B2/FS.</p> <p><b>The Front Roller and the Rear Rollers</b> as specified for type B2.</p> <p><b>The Centre Rollers</b> are cast from a special alloy S. M. steel and mounted on a heavy fixed axle. The centre Rollers are driven by combined chain and gearwheel drive. An operating handle raises and lowers the centre rollers mechanically, an automatic stop device being fixed in the extreme positions. In road curves, or when the Roller is being turned, the centre rollers are raised and the machine then operates in a manner similar to the PEDERSHAAB standard 2-Axle Road Roller B2.</p> <p><b>The Scarifiers</b> as specified for type B2.</p> <p><b>The Steering</b> as specified for type B2.</p> <p><b>The Lubrication</b> as specified for type B2.</p> <p><b>Roof over the driving Platform</b> as specified for type B2.</p> <p><b>Guarantee:</b> We guarantee our road rollers for 12 months in respect of material and constructional defects.</p>		<p>Diesel Engine Horsepower at 1200 r.p.m. .... 21</p> <p>" " Number of Cylinders ..... 2</p> <p>Weight of Roller without Ballast ..... 13000 kg</p> <p>" " " with " ..... 14000 "</p> <p>Diameter of Rear Rollers ..... 1300 mm</p> <p>Width " " " ..... 2×440 "</p> <p>Diameter " Centre Rollers ..... 1300 "</p> <p>Width " " " ..... 2×440 "</p> <p>Diameter " Front Roller ..... 1000 "</p> <p>Width " " " ..... 2×500 "</p> <p>Rear Rollers overlap Front Roller each side ..... 120 "</p> <p>Centre distance between Front and Rear Rollers.. 3540 "</p> <p>Total length of Road Roller ..... 5050 "</p> <p>Width of Track ..... 1760 "</p> <p>Forward travel speed per hour ..... 1-2.5 km</p> <p>Reverse " " " " ..... 1-2.5 "</p>		
Distribution of Pressure per cm (Width of Rollers)				
1) When the <b>Centre</b> rollers are free of road surface				
Front Roller without Ballast .....		56 kg	65 kg	
" " with " .....		58 "	67 "	
Rear " without " .....		84 "	96 "	
" " with " .....		92 "	105 "	
2) When the <b>Rear</b> rollers are free of road surface				
Front Roller without Ballast .....		8,5 kg	10 kg	
" " with " .....		6 "	7 "	
Centre Rollers without Ballast .....		138 "	160 "	
" " with " .....		152 "	174 "	
3) With the pressure of the 5 Rollers against the road surface				
Front Roller without Ballast .....		35 kg	40 kg	
" " with " .....		38 "	43 "	
Centre Rollers without Ballast .....		51 "	59 "	
" " with " .....		55 "	63 "	
Rear Rollers without Ballast .....		56 "	64 "	
" " with " .....		60 "	68 "	



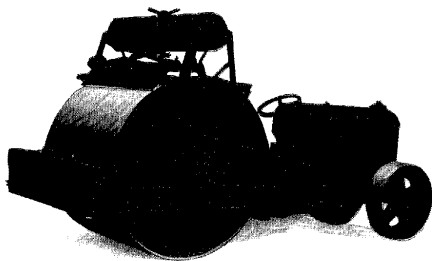
he enormous development in road traffic all over the world entails a constant and increasing demand for the repair of existing roads and the construction of new automobile roads of modern types. Hence, authorities are ever on the look-out for first class materials and efficient service.

We wish to draw attention to our many years' experience which is at the disposal of anyone interested in roadbuilding. You may with full confidence approach us with your problems. We place at your service a competent staff of skilled experts who are at all times fully conversant with technical developments.

We possess more than 50 years' experience in the production of QUALITY machines, with the result that PEDERSHAAB Road Rollers are encountered all over the globe.





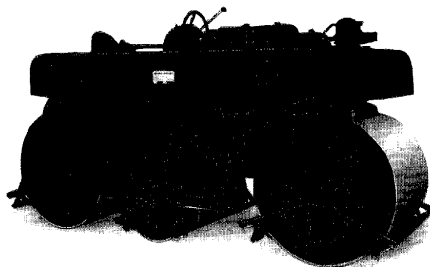


**Type F/FS**

Weight of Roller without Ballast  
5000 kg

Weight of Roller with Ballast  
6500 kg

Type F/FS. — This is a one wheel roller with water spraying attachment on top. Driven by FORD-SON tractor. Principally used for asphalt roads.

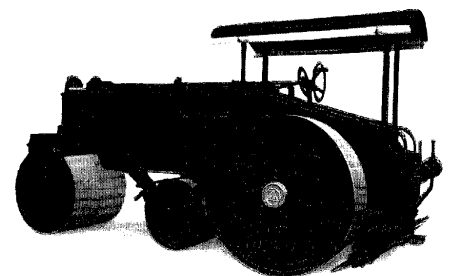


**Type C/B**

Weight of Roller without Ballast  
6500 kg

Weight of Roller with Water  
Ballast 8500 kg

Type C/B is particularly adapted for asphalt roads. Driven and steered on front and rear roller. Centre roller is mechanically lifted and lowered. Front and rear roller can be supplied with water spraying attachment on request. Driven by Petrol or Diesel Engine.



**Type B3/FS**

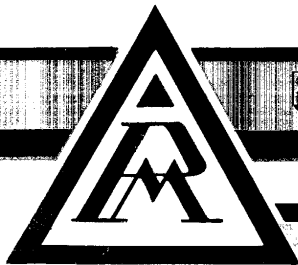
Weight of Roller without Ballast  
12000 kg

Weight of Roller with Water  
Ballast 14000 kg

The advantage of this type is the automatic mechanical lifting and lowering of the centre roller.

Otherwise identical with type B2/FS specified inside.

We also produce a complete line of other roadbuilding equipment. Catalogues and prices will gladly be sent on request.



PEDERSHAAB MACHINE WORKS LTD.

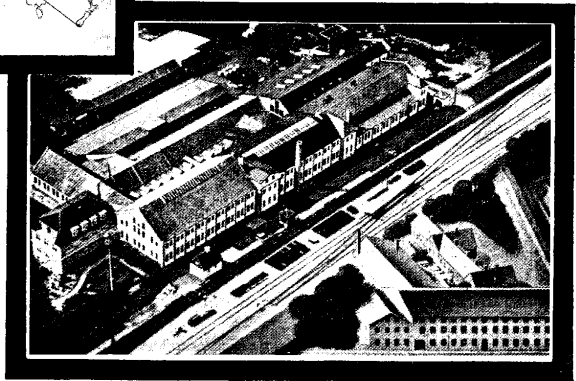


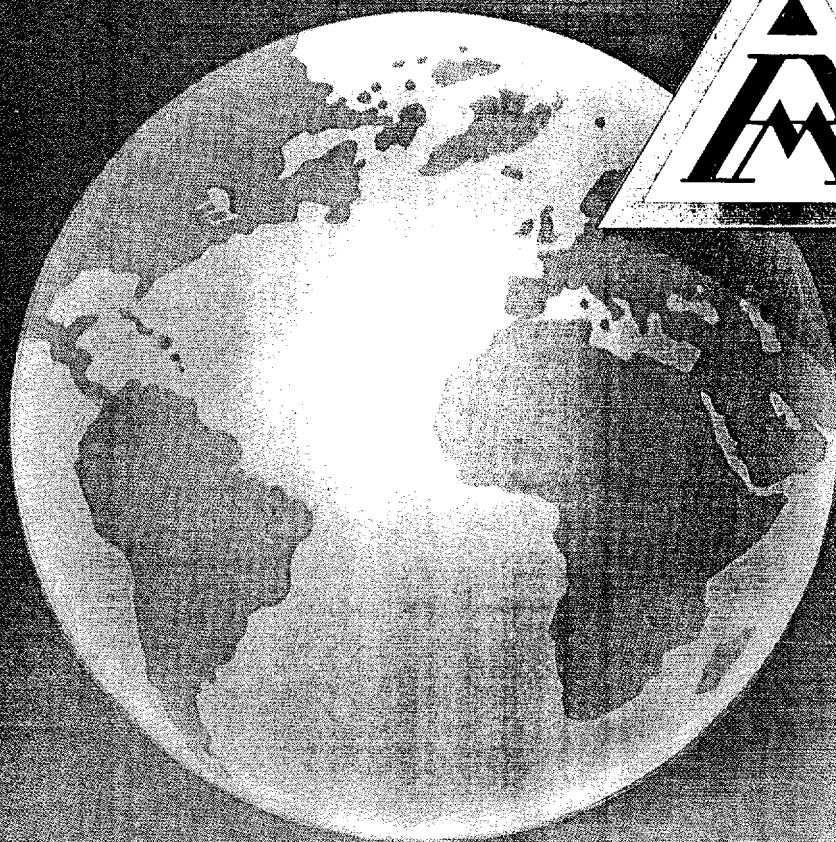
**"PEDERSHAAB" Road Rollers**

Economical • Enduring • Easy to  
operate • Manufactured according  
to our QUALITY principle • Rollers  
of special construction made to order  
• Information on request •

**MANUFACTURERS OF:**

Concrete Mixers for Hand and Power • Machinery and  
Moulds for Cement goods • Conveyors for all purposes  
• Excavators • Gravel Screening Plants • Machines for  
covering Asphalt and Concrete Roads • Pavement Tampers  
• Pile Rammers and Winches • Locomotives (Petrol and  
Diesel) • Road Rollers (Kerosene and Diesel) • Stonecrushers  
• Vibration Plants • Steel Windows and Doors





# HALF A CENTURY OF EXPERIENCE

**PEDERSHAAB MACHINE WORKS LTD.**

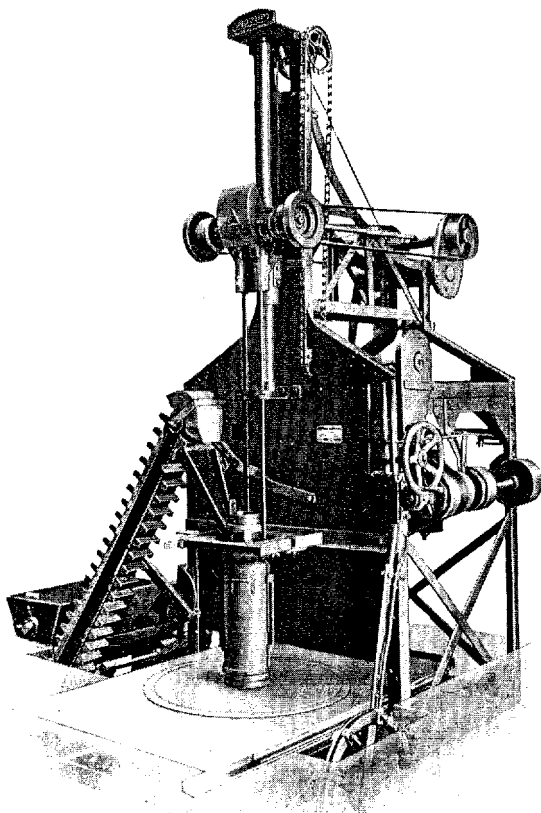
HEAD OFFICE & WORKS:  
**BRØNDERSLEV - DENMARK**

CABLEGRAMS:  
**CEMENTINDUSTRI**

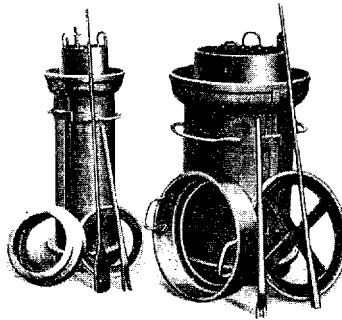
BRANCH OFFICE:  
**COPENHAGEN - DENMARK**

# PEDERSHAAB

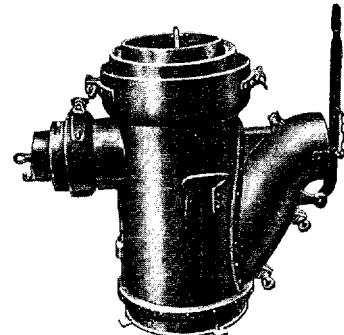
## Machinery and Moulds for Concrete Products



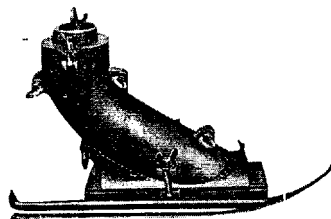
Machine for Tamping all kinds of circular Concrete Pipes from 4 ins. to 40 ins. (10-100 cm) diameter and up to a length of 40 ins. (100 cm)



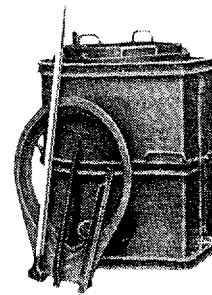
Moulds for Bell-End Pipes



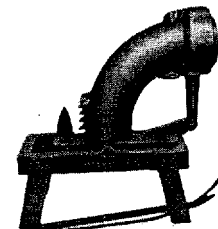
Mould for Pipes with Water Traps



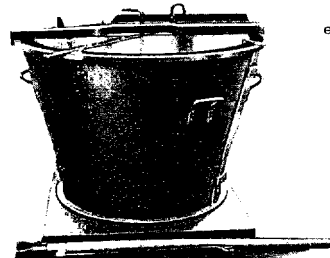
Mould for Water Traps



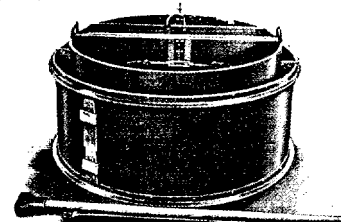
Mould for egg-shaped pipes



Mould for Bends



Mould for Conical Manholes



Mould for Well-Rings



"Favorit"



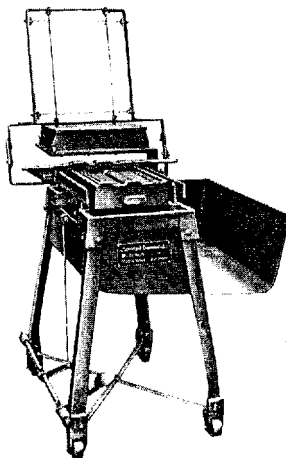
"Ideal"



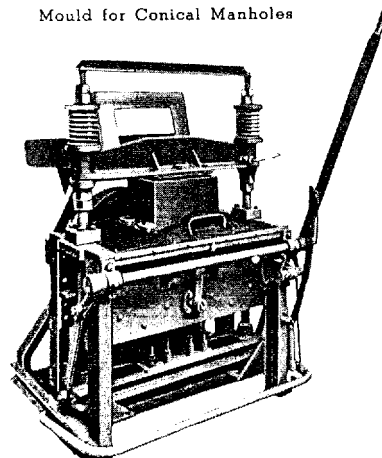
"Odense"



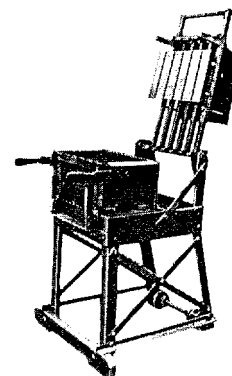
"Veile"



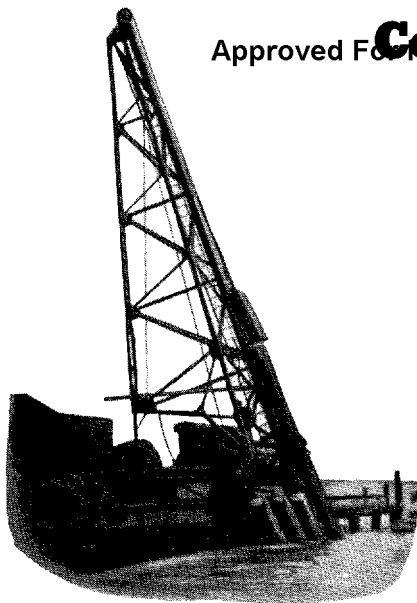
Machine for making Roof-Tiles like our Models shown Left



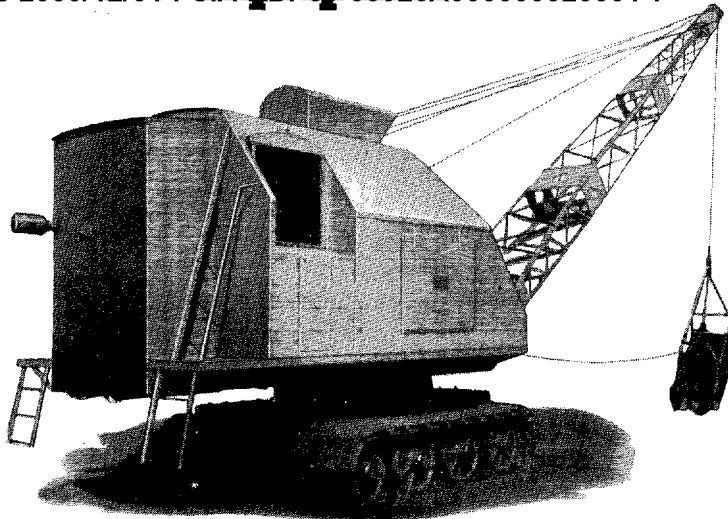
Hollow Block Machine



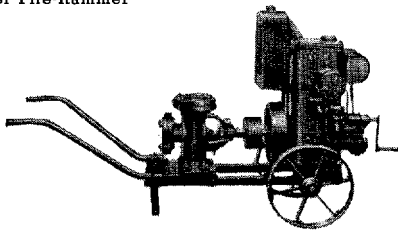
Machine for making Concrete Bricks



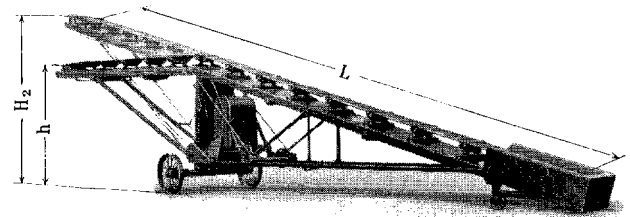
Steel Pile-Rammer



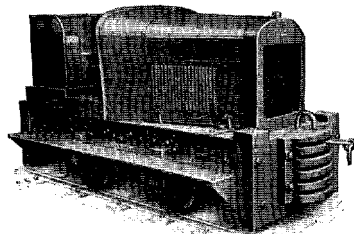
P. M. Dragline Excavator



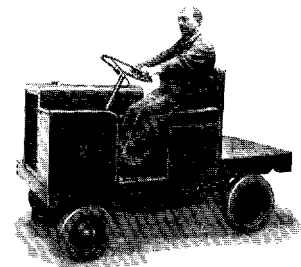
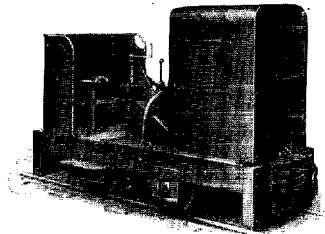
Diesel and Petrol Engine Pumps for low and high Pressure  
(rinsing pumps)



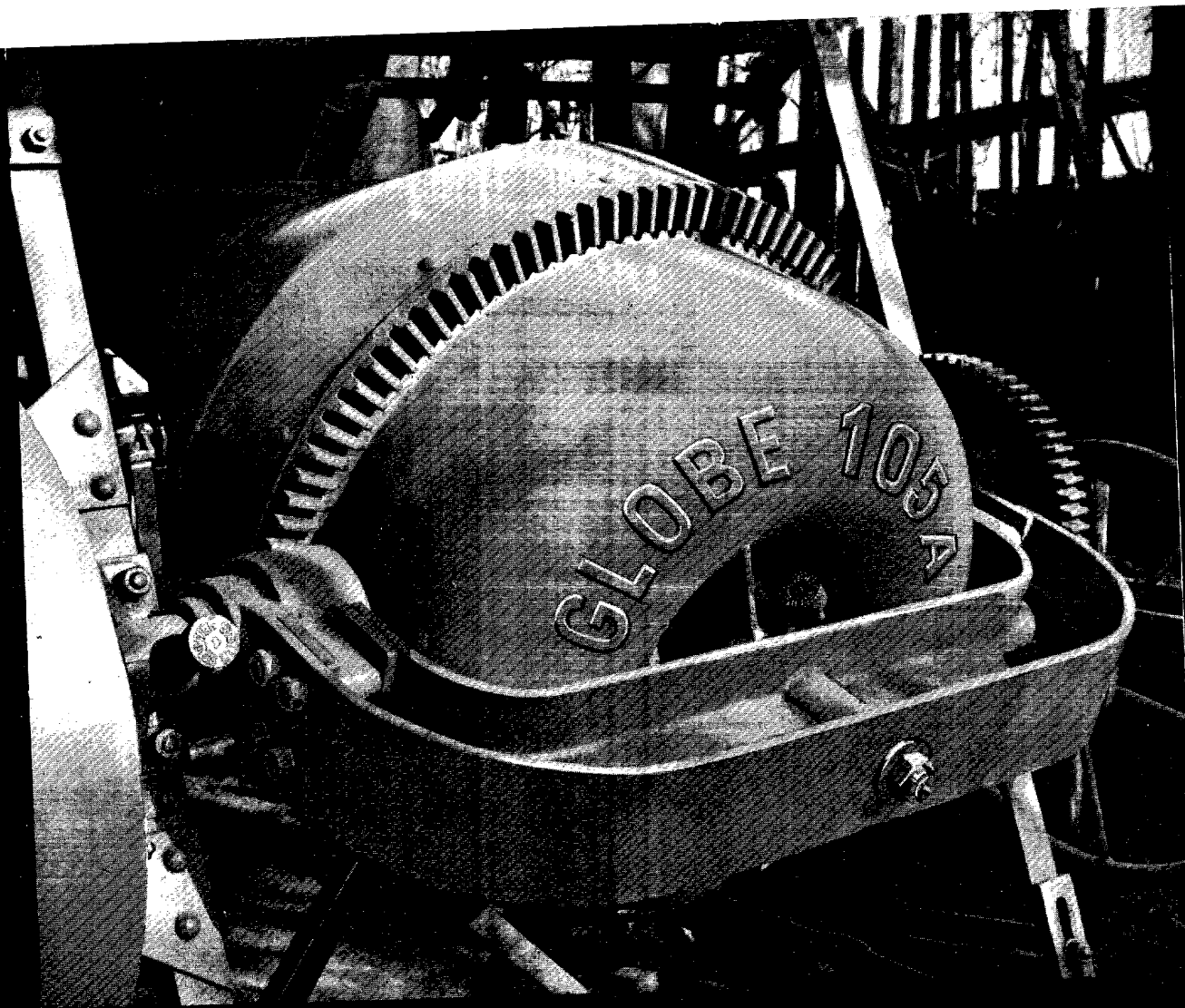
Portable Belt Conveyor



Locomotives with Petrol or Diesel Engines



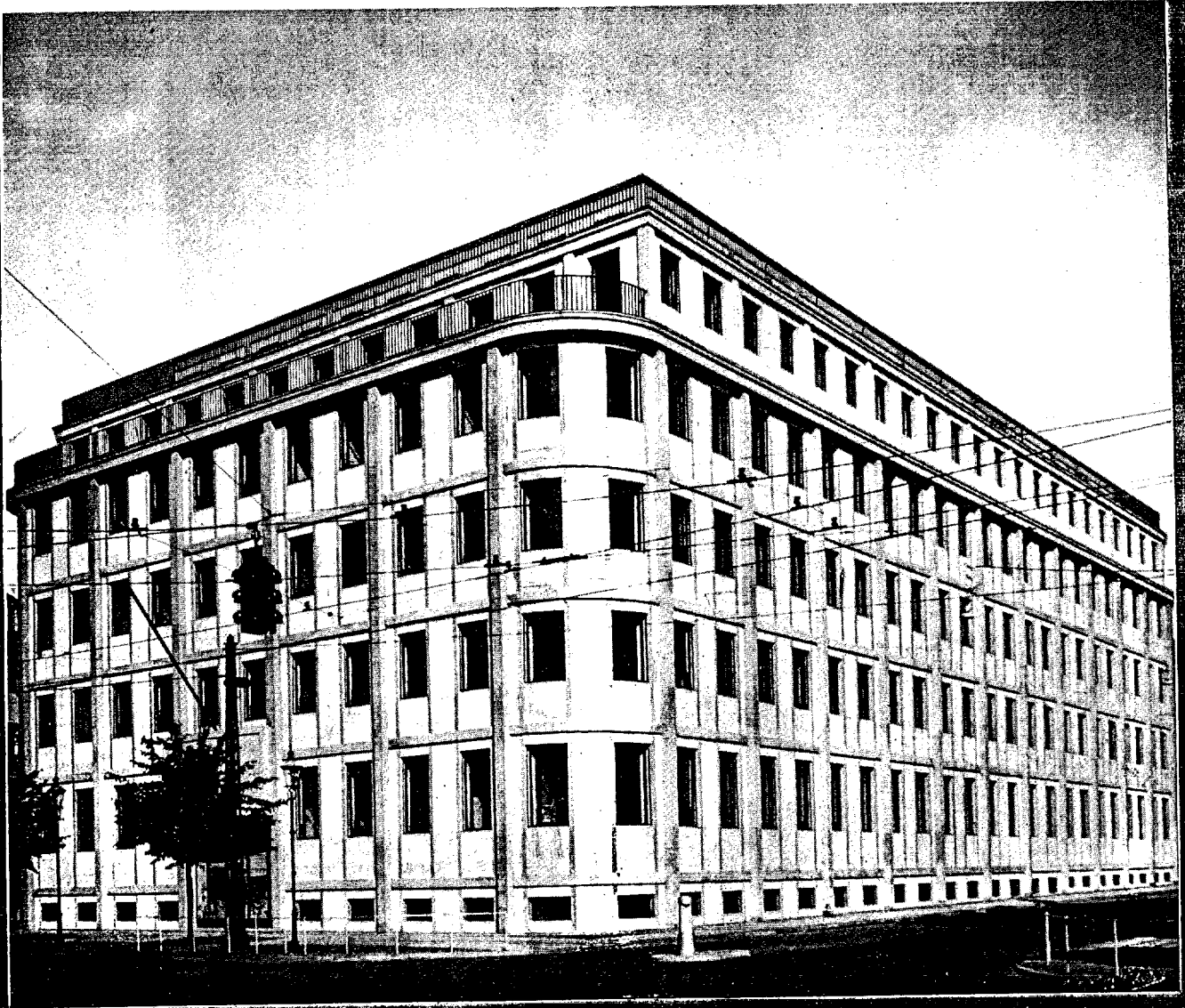
Railroad Platform Locomotive with Petrol or Diesel Engine



The GLOBE Concrete Mixer gives real value for the money.  
It is probably the fastest and most effective mixer in the world.  
Its simplicity in design and quick discharge, and the fact that thousands of our mixers  
are working all over the world should give the prospective purchaser sufficient confidence  
to communicate with us before deciding on any purchase.



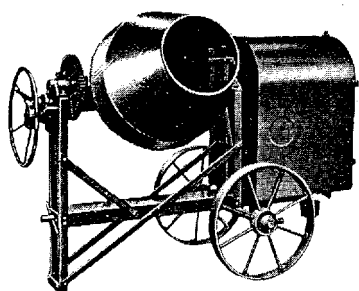
# MACHINE WORKS LTD.



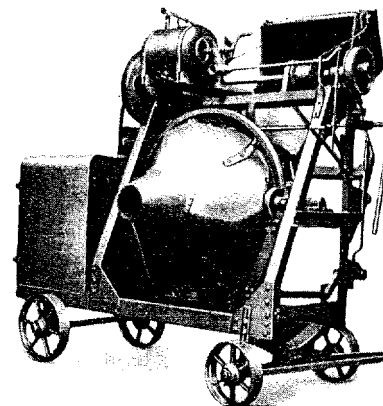
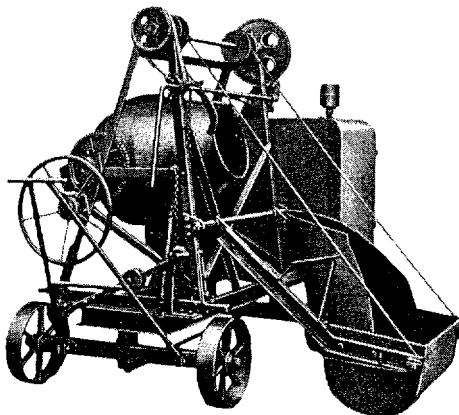
The above administration building was furnished throughout with PEDERSHAAB steel windows and doors. We manufacture designs suitable for all styles and types of architecture. Our main catalogue should be applied for by anyone contemplating building or alterations. Our standard of quality and long experience is at your disposal.

# MACHINE

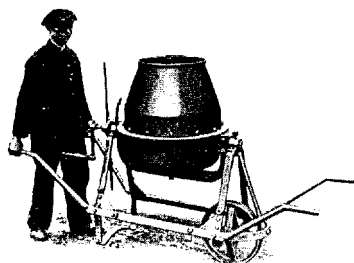
## Concrete and Mortar Mixers



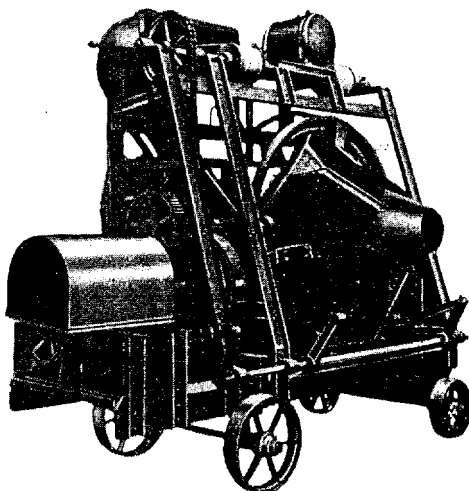
"GLOBE". "The Pearl among Mixers." Tilting System.  
from 5 to 10 cu. ft. (150 to 300 litres)



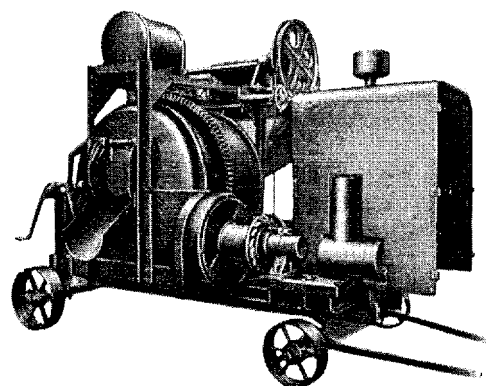
"JUTLANDIA", 8 cu. ft. (225 liter)  
This Mixer differs from all other known  
Systems. The Mixing is done without  
Shovels after the Tilting system



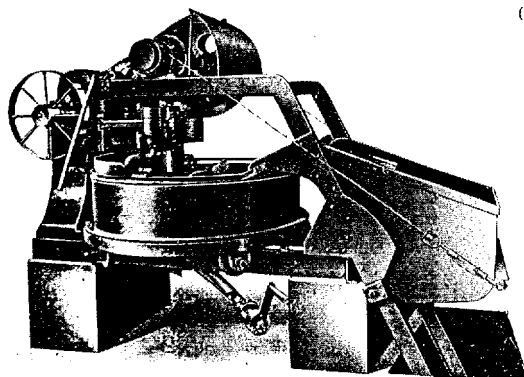
"GLOBE". Hand-Mixer for Concrete and  
Mortar 2 1/2 cu. ft. (75 litres) —  
Stationary and Portable



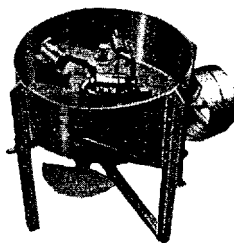
"JUTLANDIA" Mixers. 2 to 64 cu. ft.  
(65 to 1800 litres)



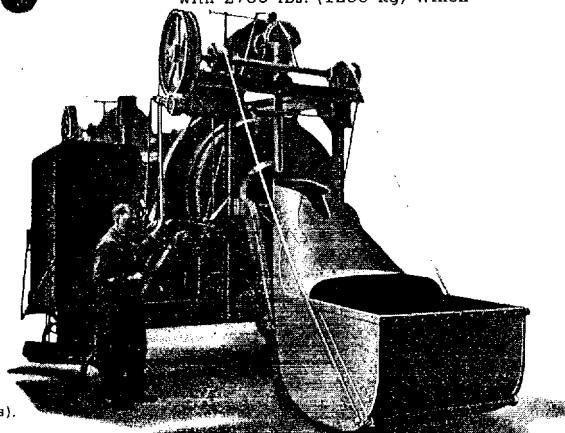
"CYCLONE" Mixer 16 cu. ft. (460 litres)  
with 2700 lbs. (1200 kg) Winch



The "UNIVERSAL" Counter Current Mixer. 8 to 50 cu. ft. (225 to 1500 litres)



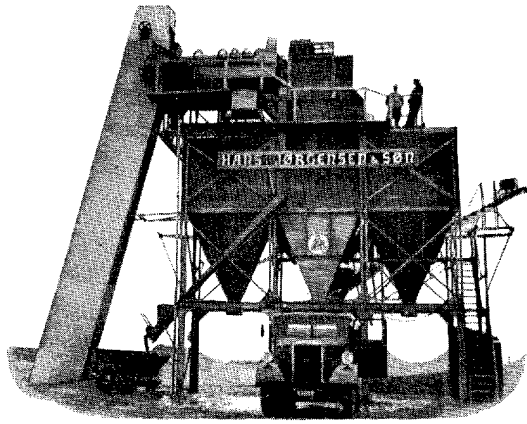
"MIXTUS", 5 cu. ft. (150 litres).  
The ideal Mixer for smaller  
Concrete Product Plants



"CYCLONE" Mixers 12 1/2 to 100 cu. ft. (350 to 2800 litres)  
The cylindrical Drum is furnished with Shovels and  
operates on the Rotary Principle



# Machinery for Gravel and Stoneworks



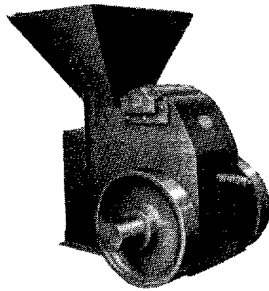
Screening and Washing Plant for Gravel



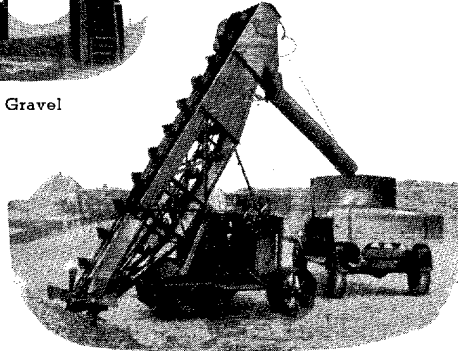
Drag-Scraper. Various Types  
built in sizes 10 to 35 cu. ft.  
(0,3 to 1 m<sup>3</sup>)



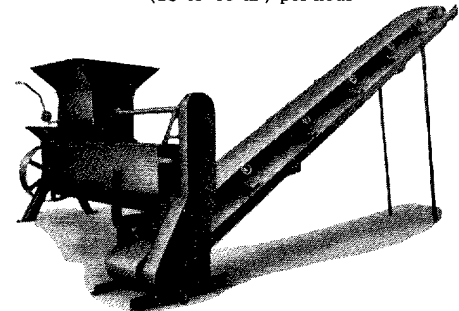
Bucket Chain Excavator. Capacity 20 to 55 cu. yds.  
(15 to 40 m<sup>3</sup>) per hour



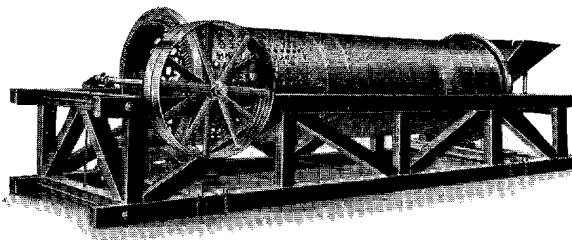
"KUBUS" Stone Crusher. Three Sizes. Capacities 5½ to  
16 cu. yds. (4 to 12 m<sup>3</sup>) per hour



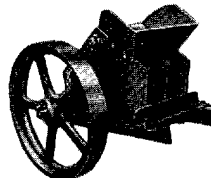
Portable Bucket Elevator



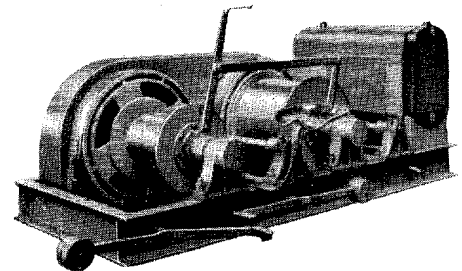
Mortar Mixer with Conveyor



Revolving Screen



Crusher. For Brick, Slag  
Coal, Marble etc.

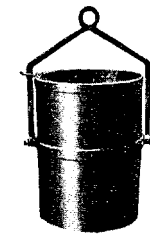
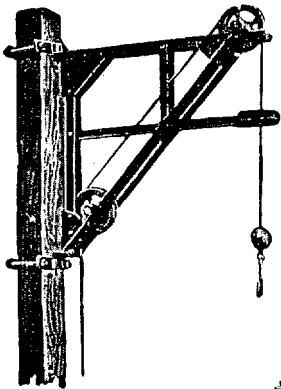


Winch for Drag-Scrapers

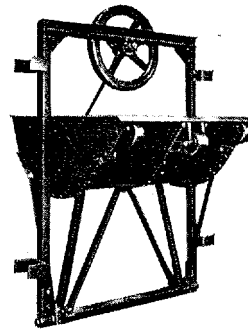


# WORKS LTD.

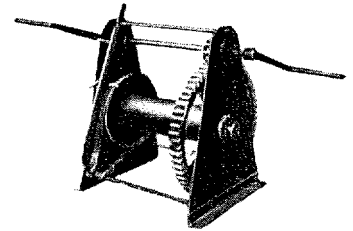
## Winches and Hoisting Accessories



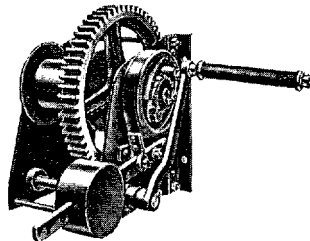
Concrete Tip-Pail  
3,5 to 7 cu. ft.  
(100 to 200 litres)



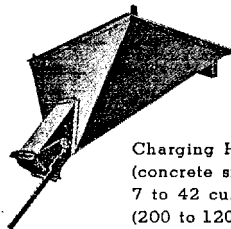
Elevating Hopper for Concrete,  
Tip Type, 3,5 to 21 cu. ft.  
(100 to 600 litres)



Winch for Erection on Floor  
1100 to 1800 lbs.  
(500 to 800 kg)



"FORCE" Winches for  
Hand Power

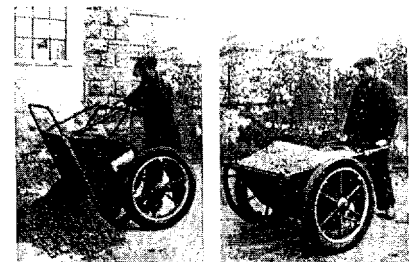


Charging Hopper  
(concrete silo)  
7 to 42 cu. ft.  
(200 to 1200 litres)

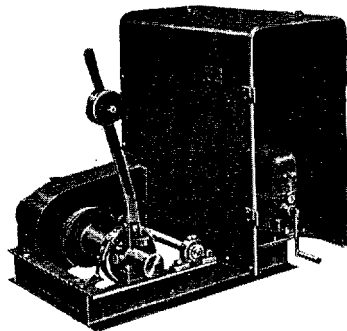
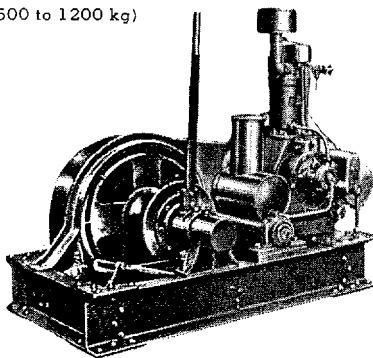


Top-Beam with Pulley  
for Elevating Hopper

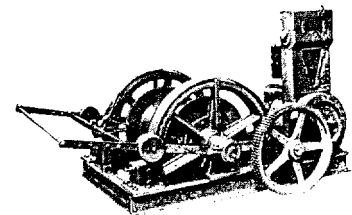
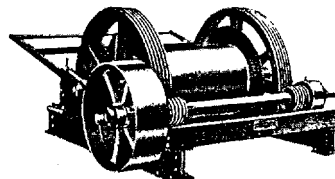
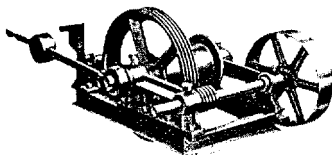
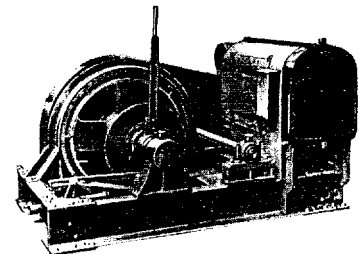
Swing Crane  
Carrying Capacity  
1100 to 2700 lbs.  
(500 to 1200 kg)



Rocker Dump-Cart for Concrete, 5 to 9 cu. ft.  
(150 to 250 litres)

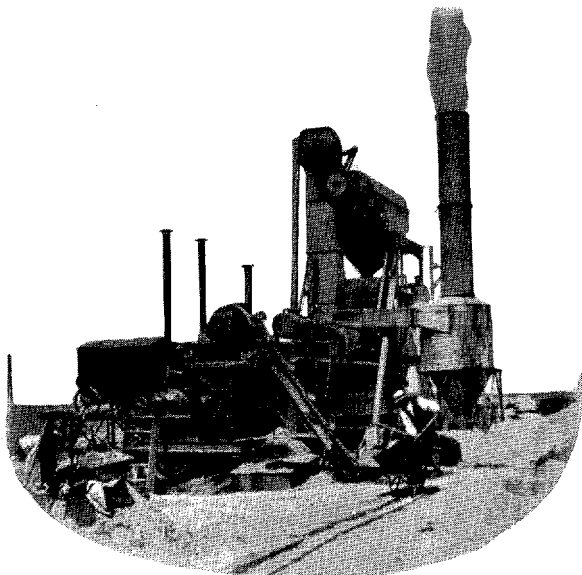


Winches for Pile-Rammers (conical friction) 550 to 8000 lbs.  
(250 to 3600 kg)

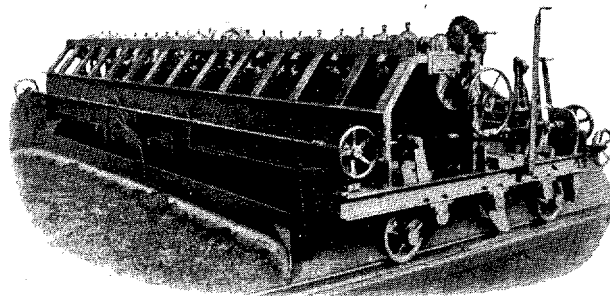


"FORCE" Winches 770 to 4000 lbs. (350 to 1800 kg) (groove friction)

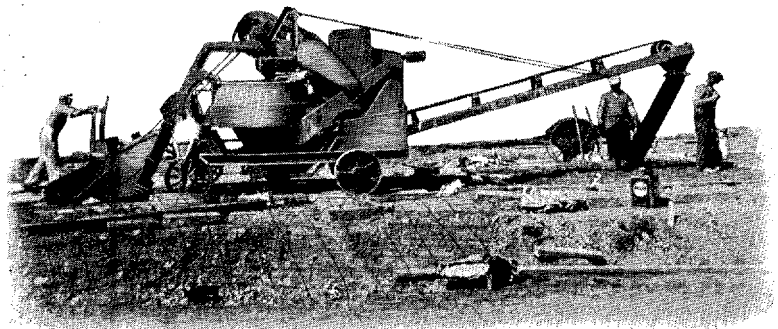
# Machinery for Roadbuilding



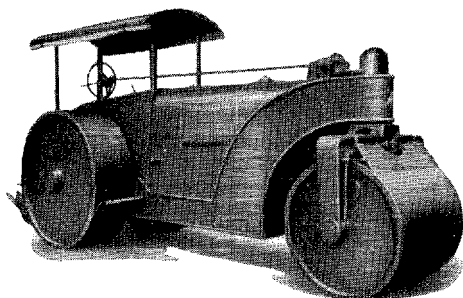
Plant for Asphalt Road Covering



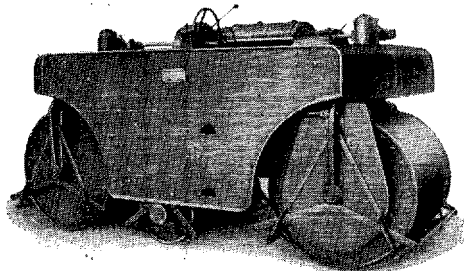
Road Finisher for Concrete Roads. Adjustable for Working Widths from 11 to 18 ft. (3,5 to 6 metres)



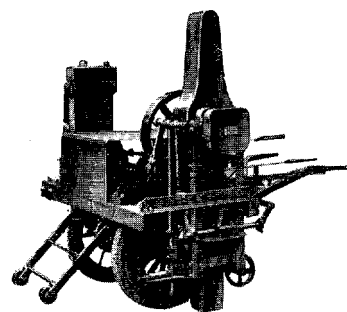
A new self-conveying Counter Current Mixer for Concrete Roads. 8 to 26 cu. ft. (225 to 750 litres)



"PEDERSHAAB" Road Rollers of 6-8, 8-10 and 10-12 tons with Diesel or Fordson Engine

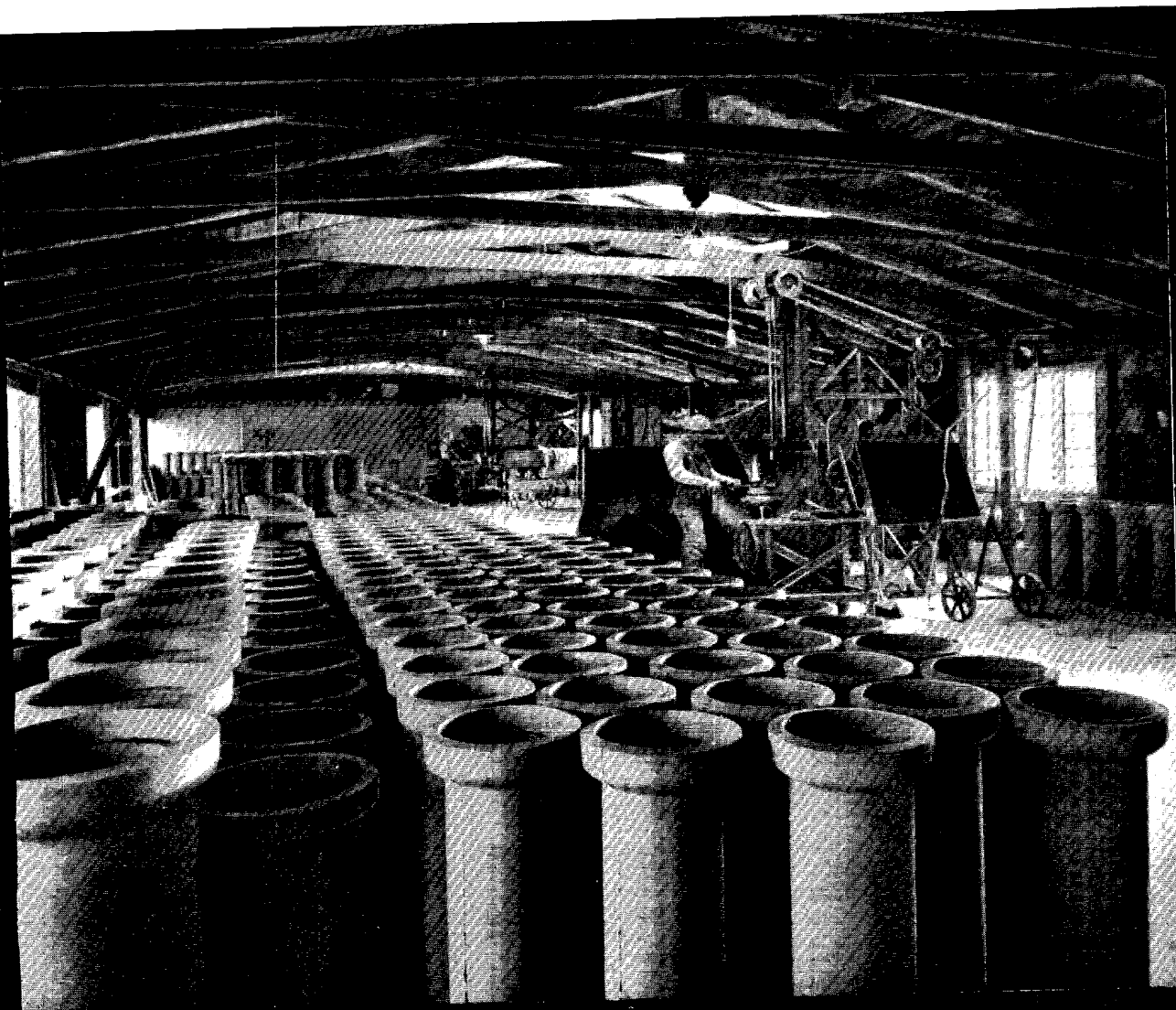


Road Roller particularly adapted for Asphalt Roads



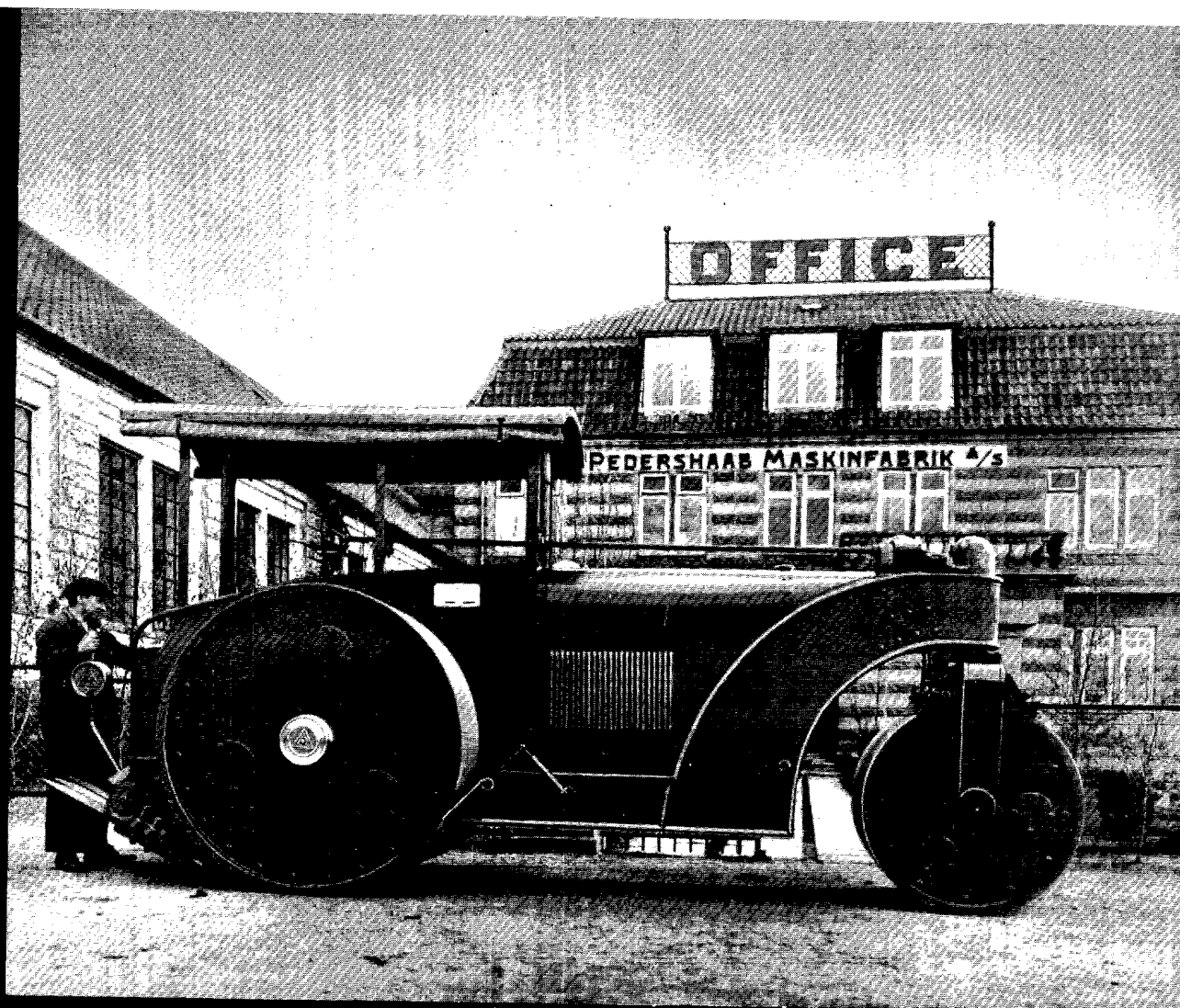
Pavement Stamping Machine. "EFFECT"

Hertz' Annoncebureau  
A/S L. Ihrich - Kbhvn.



The demand for cement products is continually increasing, and the above section of plant is but one of hundreds completely equipped by us during our many years of practical experience.

We welcome an opportunity of supplying you with all the necessary information. Particulars and prices are gladly sent on request.



The world trend in the making of new roads combined with the maintenance of old ones has made road rollers one of our most popular products. We manufacture rollers of all types and descriptions, but have found the type illustrated above the most popular on the world market to day. Our many years' experience, and our constant efforts to produce **QUALITY** equipment have placed us among the world's leaders in this special field.

MANUFACTURERS OF :

CONCRETE MIXERS  
FOR HAND AND POWER  
MACHINERY AND MOULDS  
FOR CEMENT GOODS  
CONVEYORS FOR ALL  
PURPOSES  
EXCAVATORS  
GRAVEL SCREENING PLANTS  
MACHINES FOR COVERING  
ASPHALT ROADS  
CONCRETE ROADS  
PAVEMENT TAMPERS  
PILE RAMMERS AND WINCHES  
LOCOMOTIVES  
PETROL - DIESEL  
ROAD ROLLERS  
KEROSENE - DIESEL  
STONECRUSHERS  
VIBRATION - PLANTS  
STEEL WINDOWS AND DOORS  
ETC.



ESTABLISHED 1895

# PEDERSHAAB MACHINE WORKS

LIMITED

PEDER J. NIELSEN  
MANAGING DIRECTOR  
OSCAR NIELSEN  
TECHNICAL DIRECTOR

CABLE : CEMENTINDUSTRI  
BENTLEYS - A.B.C. 5TH EDITION

BRØNDERSLEV  
DENMARK

MESSRS. DEALER & USER  
ANYWHERE

Dear Sirs,

This condensed pamphlet is sent to you for the purpose of showing some of our most popular export products.

We have only attempted for each item to illustrate the size most in use, but we produce any desired size and welcome the opportunity to quote on special jobs.

More than half a century of experience in the manufacture of Quality merchandise has placed us among the pioneers, and this is the reason for our continual success.

Catalogues and literature dealing with each article, with prices and detailed information will gladly be forwarded on request.

Yours respectfully,

PEDERSHAAB MACHINE WORKS  
LIMITED



Approved For Release 2003/12/01 : CIA-RDP80-00926A000300020001-7

# RINGSTED HAND STEERED SINGLE MOTOR ROLLER

RINGSTED JERNSTØBERI  
& MASKINFABRIK Ltd.

RINGSTED

DENMARK

TELEPHONE: 48, CABLE: RIMAS

## TYPE N

Excellent for Surface Treatment,

»Carpet Covering«, and Rolling of

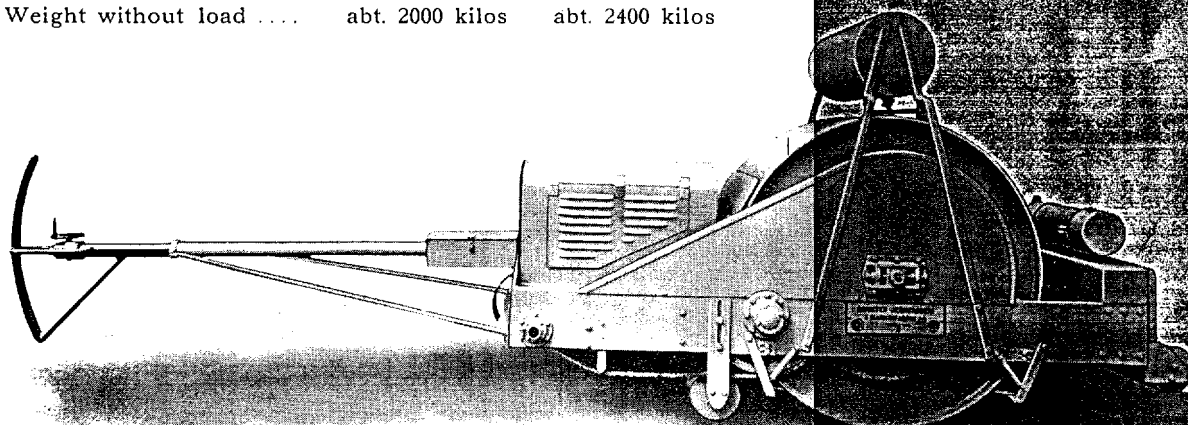
Bicycle-Tracks and Foot-Paths.

The Roller is made completely of steel. The Roller Rim consists of Siemens Martin steelplate.

The Roller turns round a fixed axle, and the roller hub is provided with bronze linings, all other transmissions are provided with ball or roller bearings. The engine is a 4 cylinder »Ford« petrol engine model ANGLIA of the newest construction, which at 1600 r.p.m. develops 8/10 HP. The engine is provided with 1 gear forward and 1 gear backwards, but the travelling speed can be varied considerably and in a handy way be regulated with a hand accelerator, placed on the steering strap. The engine is placed easily accessible on a frame outside the Roller and is balanced by a counterweight on the other side of the latter. The engine is easily and conveniently tended by a handle on the steering strap. The Roller is provided with stay rolls.

The Roller is executed in the 2 sizes mentioned below:

Diameter of the Roller .....	1500 m/m	1500 m.m
Width   »   »   » .....	760   »	910   »
Working Weight without load ....	abt. 2000 kilos	abt. 2400 kilos



We must reserve ourselves a right to differ the Rollers from the illustrations and - if necessary - to provide the Rollers with other engines with the same strength.

Approved For Release 2003/12/01 : CIA-RDP80-00926A000300020001-7

References and Offers are sent on demand.

Approved For Release 2003/12/01 : CIA-RDP80-00926A000300020001-7

# RINGSTED DIESELROLLERS

RINGSTED JERNSTØBERI  
& MASKINFABRIK Ltd.

RINGSTED

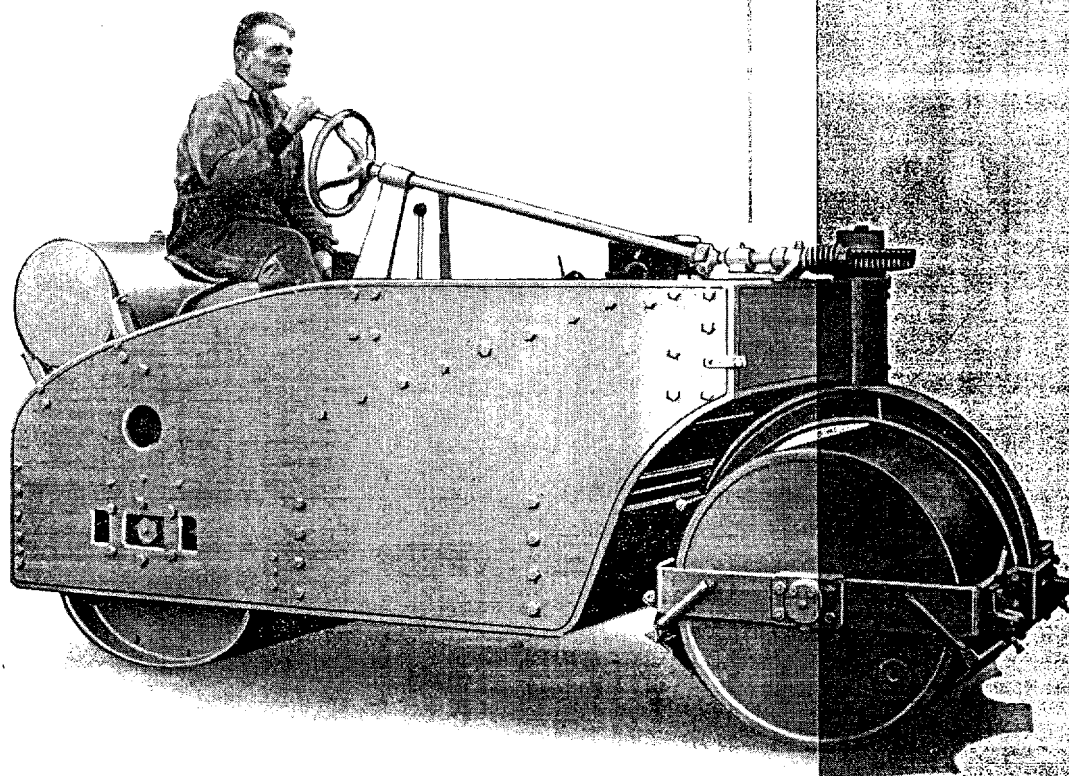
DENMARK

TELEPHONE: 48, CABLE: RIMAS



RINGSTED  
TANDEM DIESEL  
ROAD ROLLER TYPE

MD



WORKING WEIGHT 3,1 — 3,9 TONS

Approved For Release 2003/12/01 : CIA-RDP80-00926A000300020001-7



**The RINGSTED TANDEN BOLLER EN P.I.C.M.P.**

The ENGINE is a single cylinder horizontal 4 stroke Diesel engine, which is exceedingly dependable and very economic in use. It is easy to start and simple to tend. Fuel: Solar oil, consumption about 5-6 litres per 3 hour working day according to the kind of work. The power of the engine is transmitted to the rear roller through gearbox, worm gearing, and strong roller transmission chains. Engine and gearbox are placed on a common bedplate with three-point-suspension on rubber blocks.

**The LUBRICATION.** The engine has pressure feed lubrication. Everywhere on the roller where grease lubrication is used, it is effected by means of a modern pressure grease gun.

**The ROLLER RIMS** are made of special Siemens Martin cast steel of great wearhardness. The front roller is in two halves and all the rollers can be filled with water.

The **ROLLER CHASSIS** is built of strong steel plates. The right side is without projections, and the rollers are working close to it, so that it is possible to roll close to kerb-stones, house-walls, etc. The front fork is a steel casting of modern construction, arranged so that the front roller can be locked flush with the rear roller, which is very advantageous when rolling earth fillings.

The **STEERING** takes place by means of a steering wheel in connection with worm and worm wheel.

The GEAR BOX (own construction) is built together with a reversing gear, by means of which 3 speeds can be obtained in either direction of travelling. The transmission of power between gear box and rollers is done by worm gearings and roller chains. The reversing is done by moving a gear lever forwards and backwards without disengaging the clutch.

**IBBAYNE.** The roller is provided with an effective brake, which can hold the roller stationary even on steep hills.

The **MOISTENING OF THE ROLLERS** can be done by sprinkling pipes in connection with the roller.

## SPECULATING AHEAD

Total Weight of Roller without water load .....	abt. 3100 kilos
..... with .....	" 3900 "
Diameter of Front Roller .....	" 80 cm
..... Rear .....	" 90 "
Width Front .....	" 90 "
..... Rear .....	" 90 "
Center Distance between Rollers .....	" 220 "
Total length of Roller .....	" 325 "
..... Width .....	" 115 "
..... Height .....	" 170 "
Engine - 1 Cyl Diesel engine 1500 r. p. m. ....	10/11 H. P.
Normal Travelling Speed forward and backwards .....	1.8-2.0-5 km per hour
Pressure per running cm of Front Roller without load .....	abt. 16 kilos
..... with .....	" 20 "
..... without .....	" 19 "
..... with .....	" 24 "
The Water Tank contains .....	" 125 litres

Approved For Release 2003/12/01 : CIA-RDP80-00926A000300020001-7

# RINGSTED DIESELROLLERS

RINGSTED JERNSTØBERI  
& MASKINFABRIK Ltd.

RINGSTED  
DENMARK

TELEPHONE: 48. CABLE: RIMAS, RINGSTED

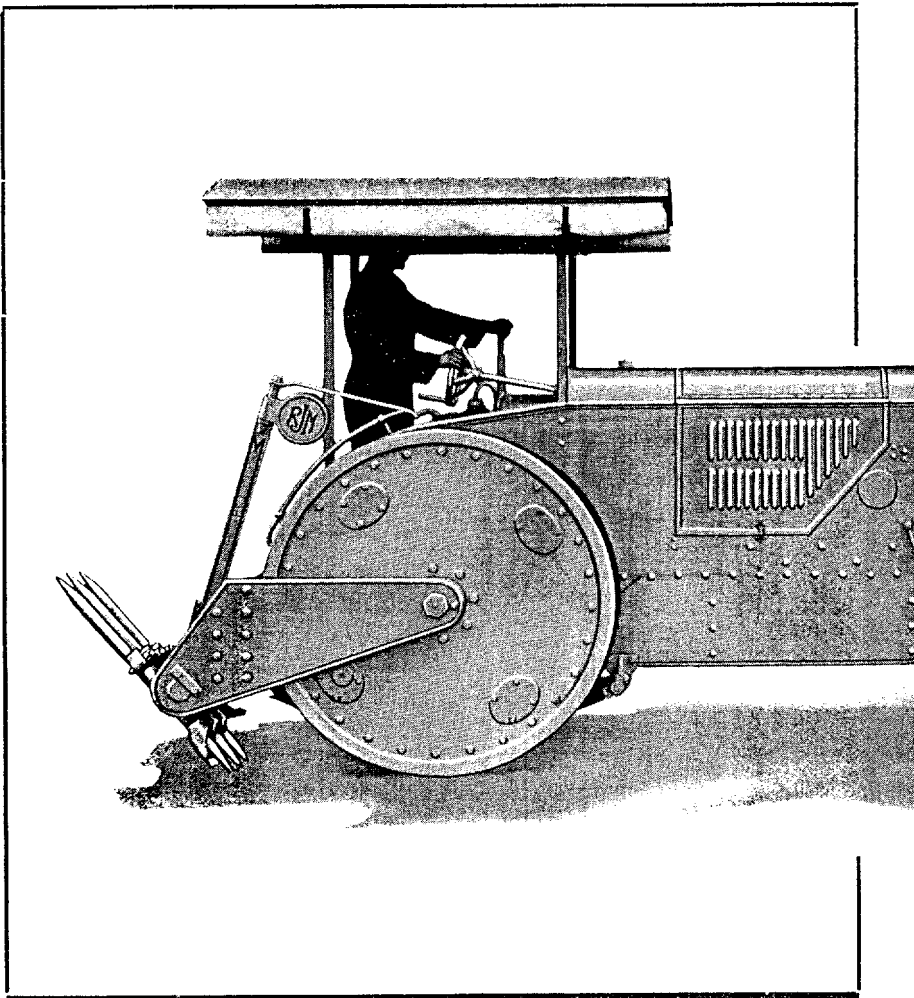


RINGSTED  
 DIESEL  
 ROAD ROLLER TYPE

K-D

QUICKLY REVERSIBLE

CHEAP IN WORKING



WORKINGWEIGHT 8,5-10 - 10-12 TONS

Approved For Release 2003/12/01 : CIA-RDP80-00926A000300020001-7

The roller rims are made of Siemens Martin manganese cast steel of great wear-hardness, and are bolted on to the side plates. The side plates are cut out of steel plates, turned off on the edges, and are a tight fit in the roller rims. The roller hubs are made of cast iron with home driven special bushes, and from long and very ample bearings for the rollers. The rollers are arranged for water filling.

**The Overlapping** between the front and the rear rollers amount to 160-210 mm on either side by means of which formation of groves in the road surface is avoided.

**The Engine** is a 4-stroke vertical Diesel engine of acknowledged make. It is easily started by hand or by compressed air, and is exceedingly reliable and cheap in working. The fuel is solar oil, and the consumption is abt. 190 g per IHPH at full load, which on an average amounts to abt. 12-15 litres per 8 hours' working-day. The engine is furnished with a sensitive speed governor, and the number of revolutions can as desired, be varied considerably while working. All important bearings and wearing surfaces are pressure lubricated, and the lubricating oils is circulated by a pump driven by the engine through a lubricating oil strainer before going out to the oiling points. The cooling water is circulated by means of a pump through a radiator placed in front of the engine.

**The Gear Box** in connection with a reversing gear imparts to the roller 3 speeds in either travelling direction. A powerful transmission brake is built into the gear box and is worked by a hand brake lever at the driver's seat.

**Steering** is done by means of a hand wheel in connection with worm and worm wheel, and built-in ball thrust bearings secure an easy steering of the roller.

The engine and moreover the machinery are entirely enclosed. All bearings outside engine and gear box are arranged for grease lubrication under pressure, and all parts are made in the most careful way and under the most satisfactory control, so that the finished manufacture proves to be a reliable and efficient engine.

# TANDEM-DIESELROLLERS

RINGSTED JERNSTØBERI  
& MASKINFABRIK Ltd.

RINGSTED

DENMARK

TELEPHONE: 48, CABLE: RIMAS, RINGSTED



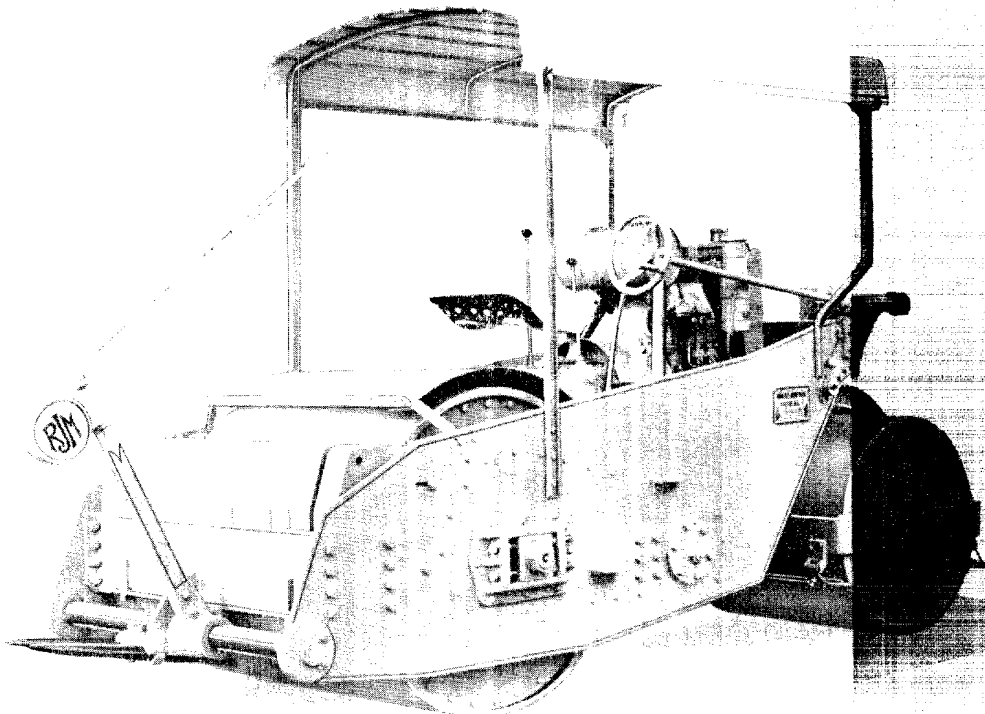
RINGSTED  
TANDEM-DIESEL  
ROAD ROLLER TYPE

## GD

~~QUICKLY REVERSIBLE~~

QUICKLY REVERSIBLE

CHEAP IN WORKING



WORKINGWEIGHT 6,5-8,0-9,0 TONS

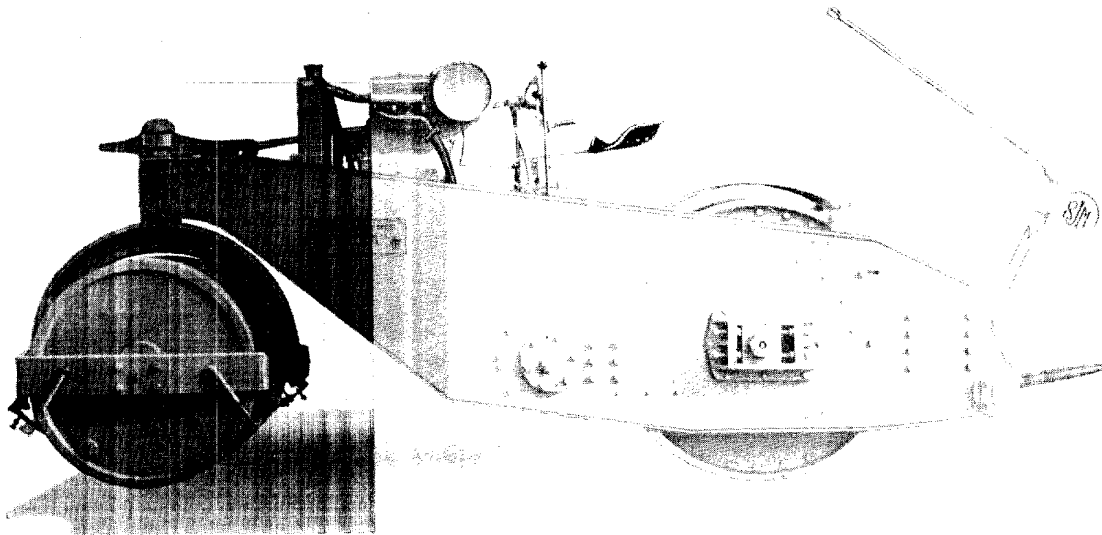


Fig. 2

**Ringsted Tandem Diesel Roller Type GD**, is fit for all sorts of light Road-making, specially rolling of asphalt-concrete, carpet covering, and other surface-treatment.

**The Roller Chassis** is built of strong steel plates. Front fork and scarifier are made of cast steel.

**The Front Fork** is of modern construction. The Roller Rims are made of Siemens-Martin cast steel of a special wear-hardness. The front roller is in two halves, and all rollers are arranged for water filling.

**The engine** is a 4 stroke vertical 2 cylinder Diesel engine of approved Danish make. It is easily started by compressed air, and is exceedingly dependable and cheap in working. The fuel is solar oil, and the consumption is abt. 200 g per HP/H at full load. The engine is fitted with a sensitive speed governor, and the number of revolutions can be varied considerably when working.

**The Engine Power** is transmitted to the rear roller through gear box, worm box with differential, and strong roller chains.

**The Gear Box** is built integral with a reversing gear which gives the roller 3 speeds forwards and backwards, and gives the roller a soft start and change of the driving direction, only by moving a reversing bar backwards or forwards.

**The Brake** is an effective transmission brake which can hold the roller stationary even on steep hills.

**The Steering** is effected by a steering-wheel in connection with worm and worm wheel and built-in ball thrust bearings ensure an easy steering.

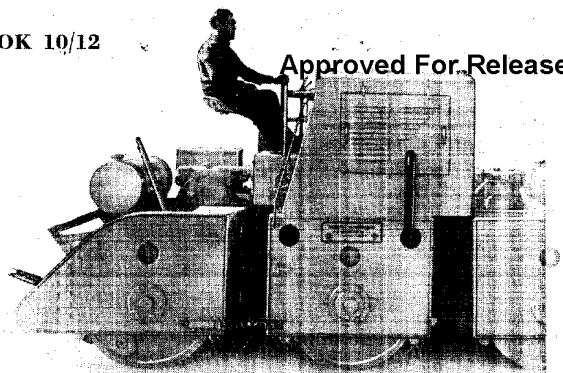
**The Scarifier** is placed movable behind the roller. It is fitted with 2 scarifier tools of the best Swedish special steel, and is easily tended from the driver's seat.

Roof over driver's seat and engine can be delivered when specially ordered.

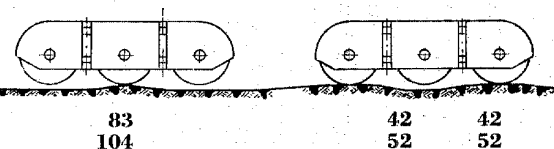
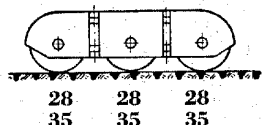
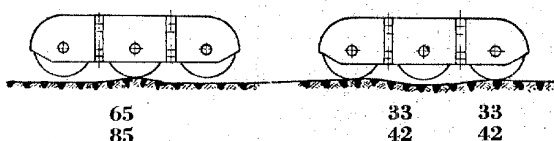
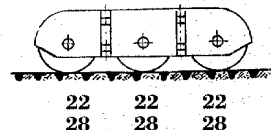
**Cast Iron Load**, abt. 1000 kilos distributed in 13 segments which can easily be mounted or dismounted, are delivered when specially ordered.

**Accessories.** All necessary lubricating and hand tools are delivered with every roller, 1 jack, 2 spare scarifier tools, and a tarpaulin for the engine.

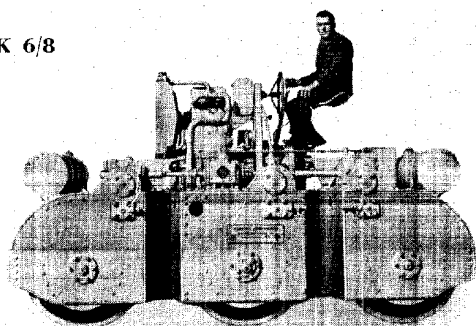
Total Weight of Roller without load...	abt. 6,000 kilos
" " " " with Water in the rollers	" 8000 "
" " " " and Cast Iron load	" 9000 "
Front Roller, Diameter	100 cm
Rear " " "	120 "
Front " " Width	160 "
Rear " " "	120 "
Centre Distance between front and rear rollers	285 "
Total Length of roller including scarifier	385 "
" " " " with Cast Iron load	500 "
" Width " "	165 "
" Height " " without roof	1.5 "
Engine: 2 cyl. vertical Diesel engine	HP,
Normal Travelling Speed forwards and backwards	1.9 - 3.6 km per hour
Working Pressure of Front Roller per running cm without load	abt. 21 kilos
" " " " with Water load	" 28 "
" " " " Rear " " without load	" 20 "
" " " " with Water load	" 13 "
" " " " with Water load and Cast Iron load	" 32 "



## WORKING PRESSURE WITHOUT AND WITH LOAD

10-12,5  
Tons6,5-8,5  
Tons

OK 6/8



the newest and most complete in the domain of rollers. By the large number of 3 axle roadrollers which we have already delivered the advantages of the same have been established and the excellent results that have been achieved by our 6.3 tons 4 axle rollers type OK have highly encouraged us to develop that roller type further by the building of bigger types, of which we have also delivered a considerable number, by preference type OK 10/12, which has held its own as a good and suitable roadroller for all road-work, which may occur.

Type OK 6.8 is delivered without Scarifier, whereas OK 10/12 is delivered with Scarifier.

The Chassis is built in 3 parts made like boxes and connected with strong hinges of cast steel, the parts are welded together of steel plates and well reinforced by strong x-members. The pivots of the hinges are case-hardened and ground and they turn in hard bronze bushes.

The Rollers consist of Roller Rims, Side Plates, and Roller Hubs with bushes driven home. The Roller Rims are made of the best S. M. cast steel of great wearhardness, and they are welded together with the side plates. The Side Plates are cut out of steel plates turned off on the edges, and fitted to the roller rims. The Roller Hubs are of cast iron with home driven bearing linings, and they turn on long and very amply dimensioned bearings for the rollers. The rollers are arranged for water filling.

The Axles are made of the best shafting steel and are firmly secured against turning in the chassis.

The Engines are vertical 4 stroke Diesel engines of first class Danish make provided with pressure feed lubrication. The engine for OK 10/12 is provided with pneumatic start. The engine for OK 6/3 can easily be started by hand. A sensitive governor with speed control is built on all engines, and the number of revolutions can be varied considerably while running. Fuel: Solar oil. Consumption abt. 190-200 g. per HP.H. The Coolant water is circulated through a front radiator by means of a direct driven water pump.

The Gear Box (town construction) is built together with a reversing gear, by means of which 3 speeds can be obtained in either direction of travelling. The transmission of power between gear box and rollers is done by worm gears and roller chains.

All Rollers are Driven. Between engine and gear box an elastic clutch is inserted. All axles in the gear box are running in ball or roller bearings. The roller chains are built into oil-tight and dust-proof chaincases.

The steering is mechanical, driven by the engine. A special steering machine is mounted on the central chassis, it turns the front and the rear chassis to the right or to the left in such a way that all rollers adjust themselves tangentially to the turning circle. By a high turning of the steering wheel abt. 180° to the right or to the left, the steering machine is coupled up, and by that means a good contact with the movement of the road-roller is obtained.

The Working Pressure of the Rollers under various conditions is shown schematically in the figures. The top figures state the working pressure per running cm of roller width without load, and the bottom figures with water load in the rollers.

Specification:	6,5-8,5 tons	10-12,5 tons
Weight without load .....	6,500 kilos	9,000 kilos
" with water load in the rollers .....	8,500 "	11,000 "
Diameter of the rollers .....	100 cm	100 cm
Width " " " .....	100 "	120 "
Working Pressure on level road without load .....	22 kilos/cm	23 kilos/cm
" " " " " with " .....	28 "	35 "
Working Width .....	100 cm	120 cm
Total Axle Base .....	265 "	310 "
Centre Distance between the rollers .....	132,5 cm	155 "
Total Length of the roller with/without scarifier .....	without 365 cm	with 470 cm
" Width .....	125 cm	150 cm
" Height without roof .....	210 "	230 "
Diesel engine: Capacity .....	1	1 HP
" " Number of revolutions .....		1100
" " " cylinder .....		
Normal Travelling Speed forwards and backwards abt. 1,6-2,5-5,0 km/hour		



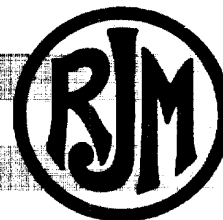
# TRIPLEX-DIESELROLLERS

**RINGSTED JERNSTØBERI  
& MASKINFABRIK Ltd.**

**RINGSTED**

**DENMARK**

**TELEPHONE: 48, CABLE: RIMAS**



**RINGSTED  
TRIPLEX-DIESEL  
ROAD ROLLER TYPE**

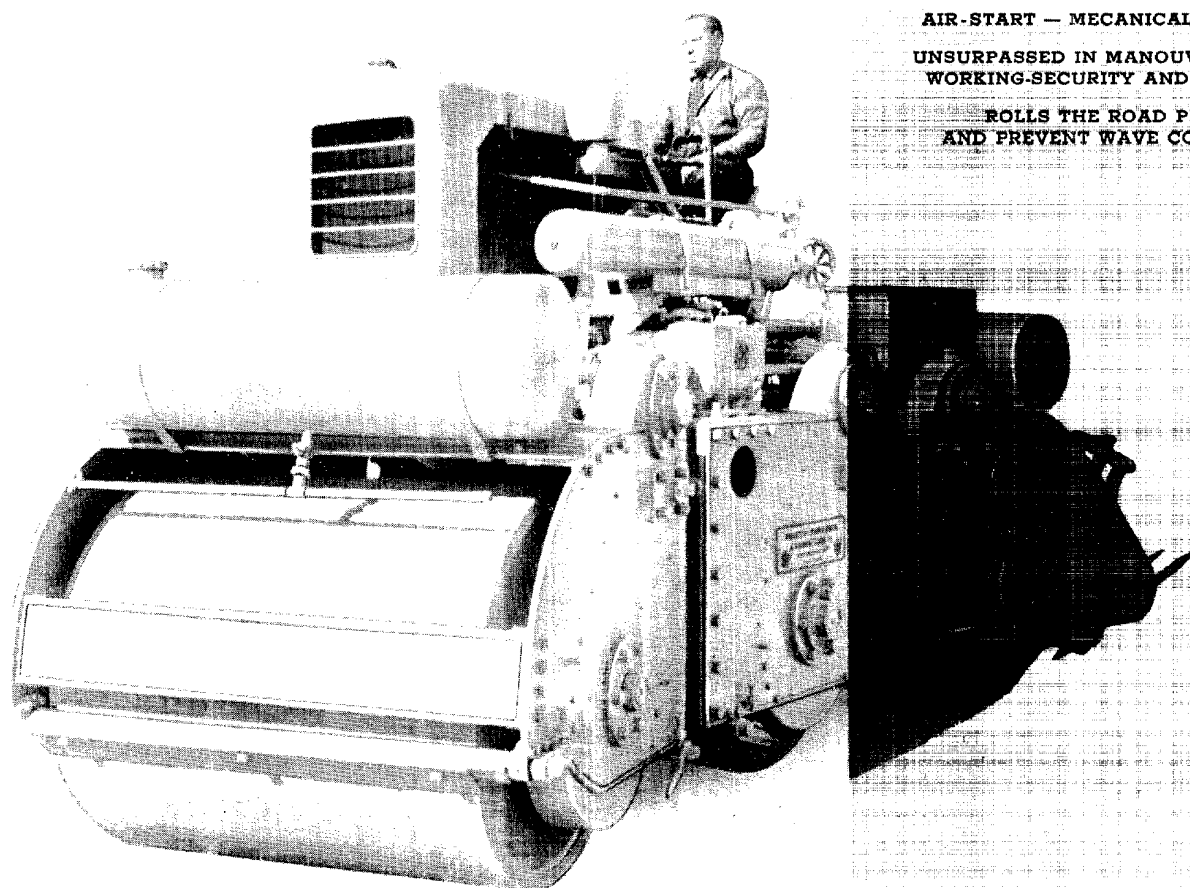
# OK

**PATENT NR. 439148**

**AIR-START — MECHANICAL STEERING**

**UNSURPASSED IN MANŌUVRE-ABILITY  
WORKING-SECURITY AND ECONOMY**

**ROLLS THE ROAD PLAIN  
AND PREVENT WAVE CONTOURS**



**WORKINGWEIGHT 6,5-8,5      10-12,5 TONS**

**Obtained silvermedall at Royal Dublin  
Society's Spring Show in Dublin May 1935**

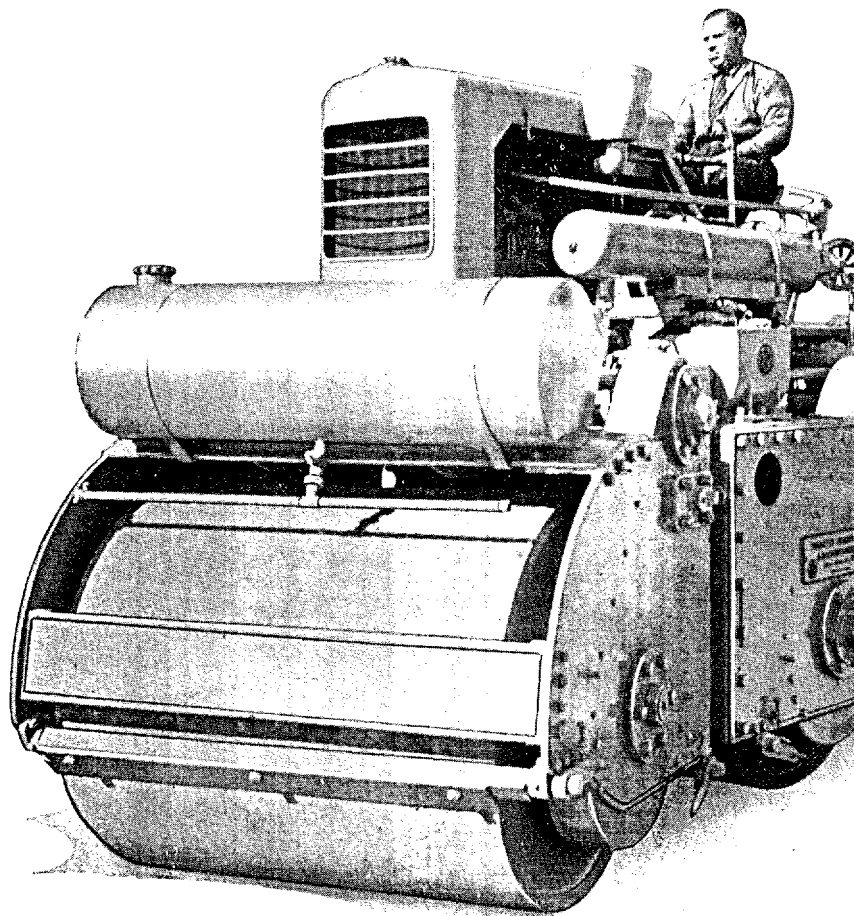
**RINGSTED**

Approved For Release 2003/12/01 : CIA-RDP80-00926A000300020001-7



**DIESEL ROLLERS**

**AND OTHER MODERN ROAD MAKING  
MACHINES**



**Ringsted Jernstoberi & Maskinfabrik**

Limited

Iron Founders and Engineers

Ringsted, Denmark

Specialist Factory for Motor Rollers

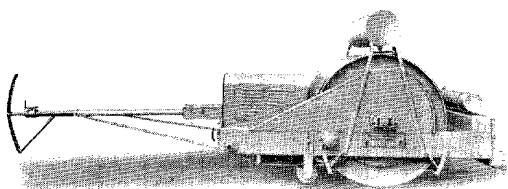
Approved For Release 2003/12/01 : CIA-RDP80-00926A000300020001-7

Telephone: 48

Cable: RIMAS, Ringsted

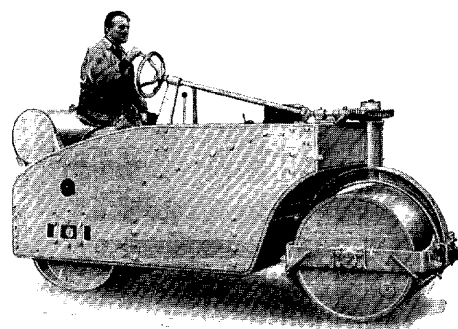


# RINGSTED MOTOR AND DIESEL

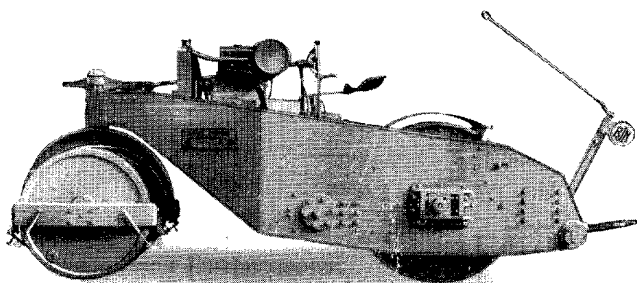


**Single Motor Roller Type N**  
**in Sizes 2 and 2,4 tons**

Roller diameter 1500 mm  
" width 760 mm - 910 mm  
(quickly reversible)



**Diesel Engine Roller Type MD, 3-4 tons**  
(quickly reversible)



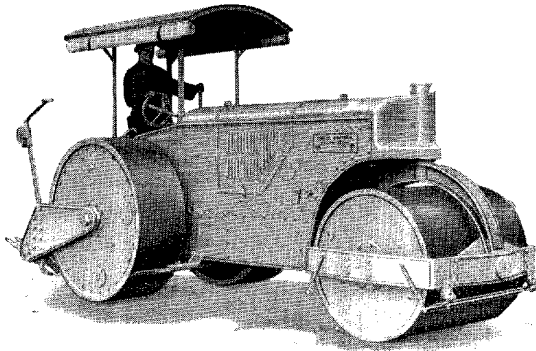
**Diesel Engine Roller Type GD**  
**6,5-8-9 tons**  
(quickly reversible)

*Delivered more than 550 Motor and Diesel*

Approved For Release 2003/12/01 : CIA-RDP80-00926A000300020001-7

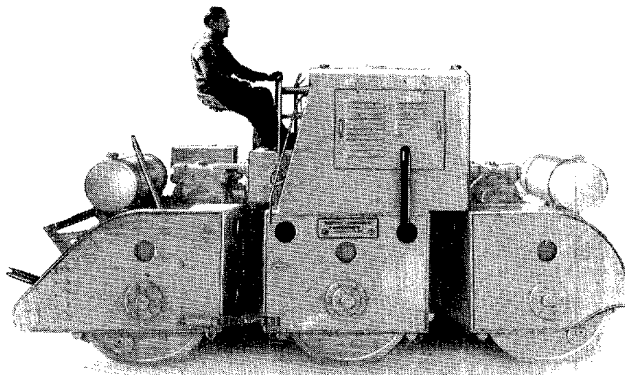
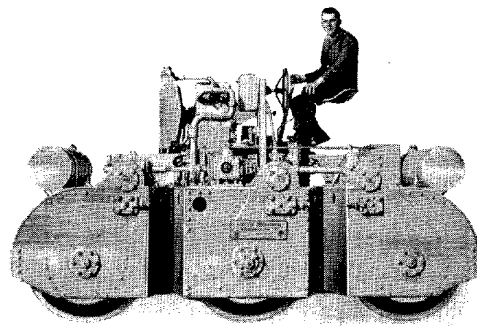
# DIESEL ROLLERS IN ALL SIZES

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**Diesel Engine Roller Type KD**  
8,5 - 10 and 10 - 12 tons  
(quickly reversible)

**Triplex Motor Roller Type OK**  
6,5 - 8,5 tons  
(mechanical steering)  
(quickly reversible)

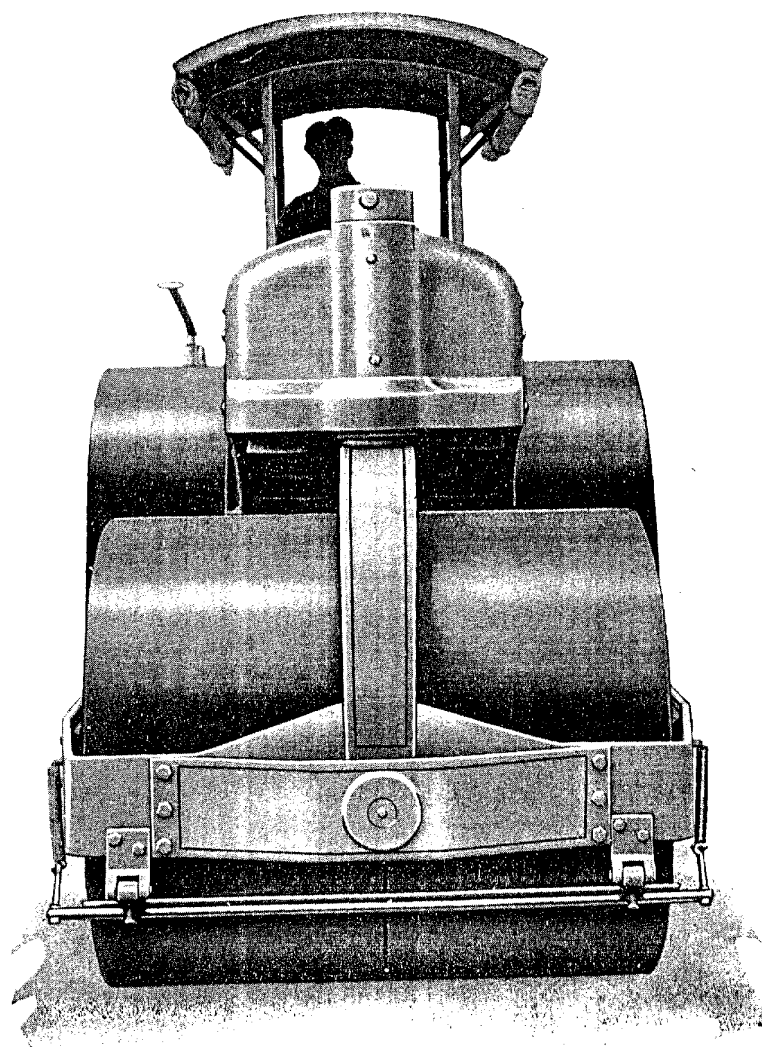


**Triplex Diesel Engine Roller Type OK**  
10 - 12,5 tons  
(mechanical steering)  
(quickly reversible)

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*d Diesel engine Rollers in Denmark*

# DEPENDABLE-ECONOMIC



Diesel engine Roller Type K D  
Working Weight 8,5-10 — 10-12 tons

*Special Prospectus will be sent on demand*